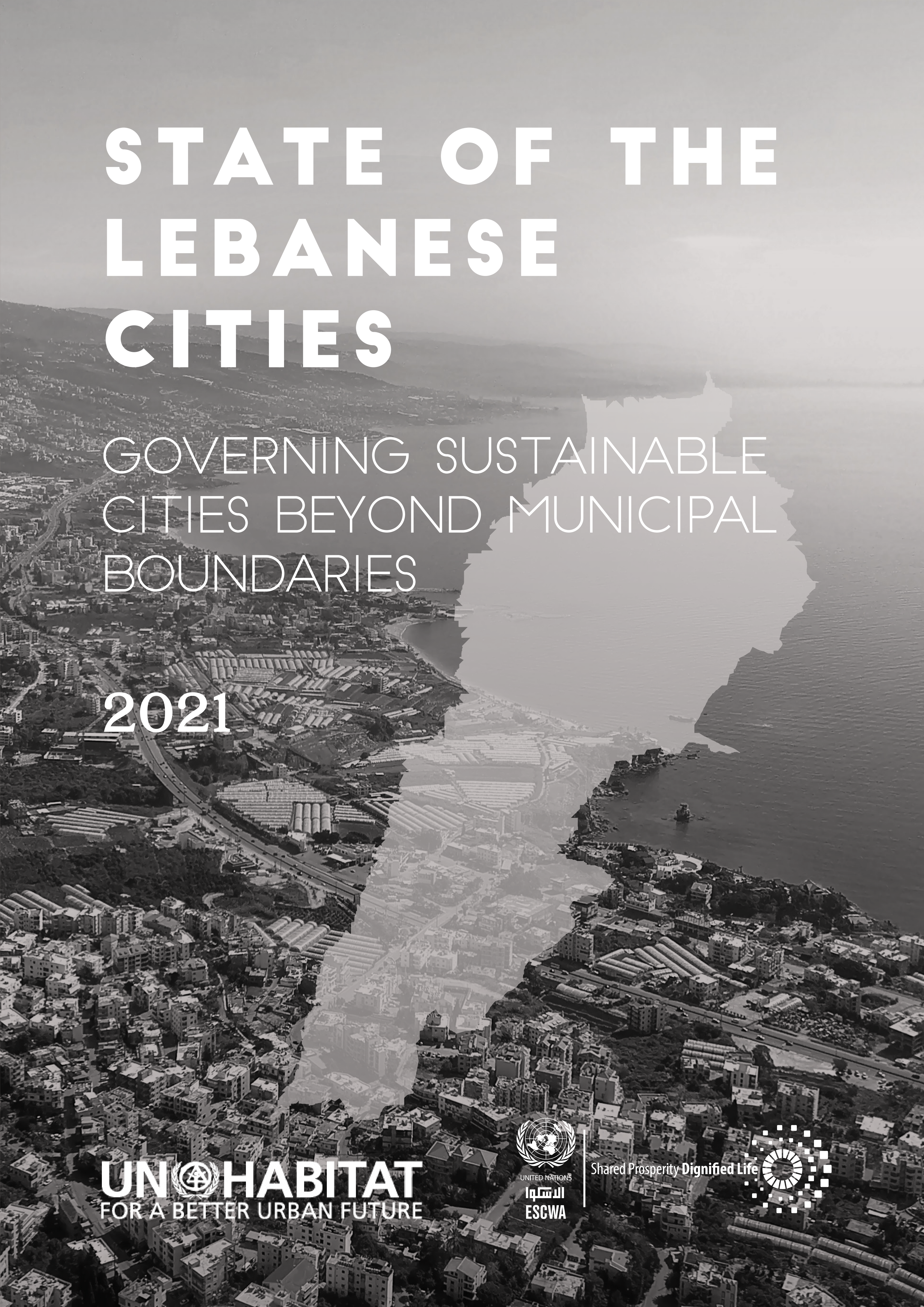
STATE OF THE LEBANESE CITIES

GOVERNING SUSTAINABLE CITIES BEYOND MUNICIPAL BOUNDARIES

2021



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UN-Habitat Lebanon city profiles[i] are available at:
http://www.unhabitat.org/lebanon/ or http://www.data.unhcr.org/lebanon/.
UN-Habitat-UNICEF Lebanon neighbourhood profiles are available at:
http://lebanonportal.unhabitat.org.

For further information including data, contact: unhabitat-lebanon@un.org.

[i] The city profile is a continually updated geographical, statistical and multisectoral description and analysis of the urban area of a city, where the boundary is defined by the continuously built-up area. Its purpose is to inform the urban crisis response, generate a national urban database, lead to a city strategy, and inform strategic project identification.

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List of abbreviations and acronyms

AFD	French Agency for Development
BML	Beirut and Mount Lebanon
BRT	Bus Rapid Transit
CARE	Cooperative for Assistance and Relief Everywhere
CAS	Central Administration of Statistics
CCA	Common Country Analysis
CDR	Council for Development and Reconstruction
CEDAW	Convention on the Elimination of All Forms of Discrimination against Women
CERD	Center for Educational Research and Development
CHUD	Cultural Heritage and Urban Development project
CNRS	National Council for Scientific Research
CoR	European Committee of the Regions
CRDP	Centre de Recherche et de Développement Pédagogique (Center for Educational Research and Development)
DAR	Dar Al-Handasah
DGU	Directorate General of Urbanism
DGUP	Directorate General of Urban Planning
DRI	Democracy Reporting International
DRR	Disaster Risk Reduction
DSWG	Data and Statistics Working Group
DTM	Displacement Tracking Matrix
EGM	Expert group meeting
ERP	Enterprise resource planning
ESCWA	[United Nations] Economic and Social Commission for Western Asia
ESSN	Emergency Crisis and COVID-19 Response Social Safety Net Project
EC	European Commission
EU	European Union
FAO	Food and Agriculture Organization
FGD	Focus group discussion
FLFPR	Female Labour Force Participation Rate
FPLF	Female Participation in the Labour Force
GCC	Gulf Cooperation Council
GDP	Gross domestic product
GEF	Global Environment Facility
GII	Global Innovation Index
GIS	Geographic Information System
GoL	Government of Lebanon
HCUP	Higher Council for Urban Planning
HLP	Housing, land and property
IACL	Inter-Agency Coordination Lebanon

IAURIF	Institut d'aménagement et d'urbanisme Île-de-France
IASC	Inter-Agency Standing Committee
ICESCR	International Covenant on Economic, Social and Cultural Rights
ICT	Information and communications technology
IDAL	Investment Development Authority in Lebanon
ILO	International Labour Organization
IMF	International Monetary Fund
IMPACT	Inter-Ministerial and Municipal Platform for Assessment, Coordination and Tracking
LBP	Lebanese pound
LCPS	Lebanese Center for Policy Studies
LCRP	Lebanon Crisis Response Plan
LEAP	LEAP Ventures
LFPR	Labour Force Participation Rate
LGBTQI	Lesbian, Gay, Bisexual, Transgender, Queer and Intersex
MCM	Million Cubic Meter
MEHE	Ministry of Education and Higher Education
MENA	Middle East and North Africa
MEVP	Middle East Venture Partners
MoEW	Ministry of Energy and Water
MoD	Ministry of Displaced
MoE	Ministry of Environment
MoIM	Ministry of Interior and Municipalities
MoPH	Ministry of Public Health
MSF	Médecins Sans Frontières (Doctors Without Borders)
MSW	Municipal solid waste
NGO	Non-governmental organization
NCD	Non-communicable disease
NPMPLT	National Physical Master Plan of the Lebanese Territory
NPTP	Lebanon's National Poverty Targeting Program
NRC	Norwegian Refugee council
NRI	Networked Readiness Index
NRSC	National Road Safety Council
NUA	New Urban Agenda
OCHA	[United Nations] Office for the Coordination of Humanitarian Affairs
OECD	Organization for Economic Co-operation and Development
OHCHR	[United Nations] Office of the High Commissioner for Human Rights
PCH	Public Corporation for Housing

PDC	Personal Disability Card
PHCC	Primary health-care centre
PISA	Programme for International Student Assessment
PIUP	Participatory Incremental Urban Planning
PM	Prime Minister
PRL	Palestine refugees in Lebanon
PRS	Palestine refugees from Syria
PWS	Public Works Studio
RACE	Reaching All Children with Education Plans
RAWMEC	Recycling & Waste Management Exhibition & Conference
REAL	Real Estate Syndicate of Lebanon
SGBV	Sexual and gender-based violence
SDG	Sustainable Development Goal
SISSAF	Support programme for Infrastructure Sector Strategies and Alternative Financing
SNG-WOFI	World Observatory on Subnational Government Finance and Investment
SoLC	State of Lebanese Cities
SWM	Solid waste management
TVET	Technical and Vocational Education and Training
UHC	Universal health coverage
UN	United Nations
UN-Habitat	United Nations Human Settlements Programme
UN-Habitat ROAS	United Nations Human Settlements Programme Regional Office of Arab States

UNDAF	United Nations Development Assistance Framework
UNDESA	United Nations Department of Economic and Social Affairs
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children’s Fund
UNISDR	United Nations Office for Disaster Risk Reduction
UNRWA	United Nations Relief and Works Agency for Palestine Refugees in the Near East
UNSDCF	United Nations Sustainable Development Cooperation Framework
UoM	Union of municipalities
USD	United States Dollar
VLR	Voluntary Local Review
VNR	Voluntary National Review
WB	World Bank
WE	Water Establishment
WECD	World Commission on Environment and Development
WEF	World Economic Forum
WHO	World Health Organization
WW	Wastewater
WWAP	World Water Assessment Programme

Executive Summary

Lebanon as a country of cities

With 88.9% of the people in Lebanon estimated to be living in urban areas, a figure set to rise to 90% by 2030, Lebanon is a country of cities (UNDESA, 2018a). In the 30 years to 2021, the ten largest cities collectively expanded to cover an additional 100km^2 of land, equivalent in area terms to adding four new cities the size of present-day Tripoli. Sustainable development in this small, densely populated country largely means sustainable urban development.

Report scope

This report focuses attention on cities in Lebanon. It evaluates the status of its main cities as well as barriers and opportunities relevant to the ambition of guiding urban expansion towards more sustainable forms. Analyzing the ten main cities containing 69 municipalities and 41% of the people in Lebanon, it presents multisectoral primary and secondary data related to sustainable urban development at national and city level, highlighting interfaces with the global sustainable development goals (SDGs) and human rights. The report advocates for an urban bias in policy deliberations relevant both to aspects of recovery from the current compound crises unfolding in Lebanon since 2019, and to how sustainable development is envisioned more broadly.

Method

In the absence of reliable demographic, infrastructure and services data comparable across cities or of official urban/rural boundaries, a range of evidence sources was gathered for ten selected cities (Table i) defined in terms of their continuously built up areas.

City	Governorate
Tripoli	North
Beirut	Beirut, Mount Lebanon
Jounieh	Mount Lebanon
Byblos	Mount Lebanon
Baalbek	Baalbek El-Hermel
Hermel	Baalbek El-Hermel
Zahleh	Bekaa
Saida	South
Tyre	South
Nabatiyeh	Nabatiyeh

Table i Ten main cities selected for analysis.

Earth observation data was used to define cities' footprints; expansion over the last three decades; and current density of built land cover. Population estimates stratified by the main nationality groups (Lebanese, Syrians, Palestinians in Lebanon, Palestinians from Syria) available at cadastre level[i] were fitted to these city limits to estimate city populations. Secondary sectoral data was collated from a range of georeferenced sources and related as closely as its granularity allowed to the continuously built up areas. A literature review was conducted to identify sectoral SDG indicator scores and intersections with human rights; and to support overall interpretation of the data. Ten city dashboards each comprising city-specific facts were produced as a form of mini-city profiles.

Key informants were consulted on draft versions of report sections. Provisional findings were presented to Lebanese urban policy and research experts during an expert group meeting. Ten city-specific consultation meetings were convened to which a total of 69 municipalities making up the cities were invited, involving validation of the draft city dashboard, and a semi-structured questionnaire aimed at identifying if municipalities in a given city collaborate on strategic urban issues and barriers to such collaboration. Sectoral and cross-cutting entry points and recommendations for moving towards sustainable urban development in Lebanon were then formulated. The draft report was sent for peer review to all key informants, expert group meeting invitees, municipalities, and selected UN agencies.[ii]

Weak urban services in a context of compounding crises

As we continue along the current 'Decade of Action' (UN, 2020) to 2030 focused on implementing the global Sustainable Development Goals (SDGs), progress against the SDGs will depend on improvements in housing, infrastructure and services in Lebanon's cities and towns. The baseline is increasingly challenging. Lebanon has long suffered from entrenched deficits in housing, infrastructure and basic urban services and weak governance underlying these public policy areas, with impacts accruing disproportionately to the most vulnerable communities and households. These deficits have been both highlighted and exacerbated by compounding crises affecting the country particularly since 2019. The banking and economic crisis emerging since that time has led to a severe economic depression with the associated currency devaluation a main driver pushing income poverty from 25% of people in 2019 to 74% in 2021 (ESCWA, 2021). A multidimensional measure

i Population data is from IACL (2020) used in the Lebanon Crisis Response Plan (GoL and UN, 2021).

ii See Annex 3 for report consultation and validation entities.

of poverty which also factors in aspects of public service access puts the 2021 figure at 82% (Ibid). Public health measures related to the COVID-19 outbreak in Lebanon since early 2020 have, as elsewhere, further inhibited economic and livelihoods activities. The Beirut Port explosions of mid-2020 responsible for loss of life, injuries and catastrophic damage to the capital city's built fabric and economic, social and cultural systems constituted a further shock.

Harnessing Lebanon's inexorable urban growth for sustainable development

Urban expansion appears an inexorable trend from a high baseline in Lebanon, with earth observation imagery analysis in this report showing cities now spilling over multiple times the land area they occupied 30 years ago. The question is not whether urban growth will continue but rather how that growth will be managed. How can urbanization in Lebanon be better leveraged to alleviate poverty, and to remedy the human rights violations integral to the gross inequalities between communities and households in access to adequate and secure housing, water and sanitation and other rights-related themes reflected across the SDGs? Through what policy instruments can urbanization be better guided to support rather than deter economic development and inward investment?

The potential for harnessing the dynamics of urbanization to contribute to sustainable development is well recognized in the New Urban Agenda (UN-Habitat, 2017). Per capita unit costs of providing networked utility and key social services are lower in densely population areas. There are important opportunities for lowering energy use and controlling pollution in cities - the major global sites of energy consumption and emissions generation - through good urban management and planning. The UN Deputy Secretary-General has stated that 'It is in cities where the battle for sustainability will be won or lost' (UN, 2017a).

Sectoral highlights and selected recommendations

Administrative context

Recommendation: Map the state and non-state entities geographically aligned to each continuously built up city

The ten main cities range in municipality count from one (Hermel) to 31 (Beirut). The cities are divergently configured in terms of municipalities, unions of municipalities, districts and governorates. Two cities cut across district boundaries (Beirut, Tripoli). One city even cuts across two governorates (Beirut). All are partly of fully within one or more unions of municipalities. The configuration of institutional stakeholders to whom the question of urban development falls varies widely from city to city. A mapping of city stakeholders geographically aligned to the continuously built up area of each city, and extending beyond state entities, would be a first step towards participatively formulating a whole-of-city vision vision.

Space

Recommendation: Measure and plan for cities with different growth pressures

Lebanon's built up area and its main cities are geographically concentrated on its seaboard, with a limited number of major inland poles (Figure 3, page 84).

Rates of growth in terms of land area have ranged from steady to explosive, with fastest growth over the last 30 years in inland cities from lower baselines (Figure 6, page 96). Baalbek has grown by an astonishing 718% compared to Beirut's 38% at the lower extreme. Nonetheless, the largest absolute land area increase was in Beirut, which added over 30km^2 over that period (Table 14, page 101). The relative growth trajectories of different cities need to be understood and factored into national spatial development policy so that services and infrastructure investment decision-making can prioritize gap-filling for the present but also solve for the future.

Population

Recommendation: Generate population data through official channels that can be disaggregated to urban areas

The ten cities combined contain 1.26 million people or 41% of the population in Lebanon. They have a lower proportion of Non-Lebanese (27%) than the national average (31%). At city level, however, some cities are overwhelmingly Lebanese (Jounieh is 93.9% Lebanese) whilst others approach an even split between Lebanese and Non-Lebanese (Zahleh is 47.6% Non-Lebanese; Saida is 38.7% Non-Lebanese). This highlights city baseline divergence from a demographic perspective. The population of the ten cities has been estimated based on cadastral population figures linked to respective continuously built up areas. However, that population dataset is provisional and caveated in the absence of official population figures; moreover there are no official urban boundaries in the country's statistical architecture to support urban analysis within a consensus-based geographical framework. Population data and projections thereof disaggregated to city level are required for medium and long-range planning of urban infrastructure and services.

Recommendation: Encourage managed population density in cities to lower the per capita cost of services including mass transit

Cities operate more efficiently at higher population densities, with lower land consumption and utilities cost per capita, lower car dependency and increased walkability and other soft mobility-mediated access to closely located services, and more scope for public

transport infrastructure investment. Population density in the ten selected cities ranges widely, reaching a fairly dense 13,653 persons/km^2 in Tripoli and dropping to 3,722 persons/km^2 in Baalbek (Table 14, page 101). UN-Habitat (2016) recommends 15,000 persons/km^2 as a guideline for compact, land-efficient urban neighbourhoods. Most of the ten cities fall very far behind this benchmark – none further than the fastest growing of the ten cities, Baalbek. This strongly indicates the urgency of active management of urban sprawl, thereby increasing the number of households that can be serviced for a given cost.

Urban governance

Recommendation: Institute a national public entity for coordinating the spatial dimensions of ministries' activities

At national level, urgent consideration is required to re-instituting a public entity for coordinating the spatial dimensions of sector ministries' service delivery and investments (eg Ministry of Energy and Water; Ministry of Public Works and Transport; Ministry of Environment, Ministry of Culture; also Committee for Development and Reconstruction), potentially starting with reflection on the experience with a Ministry of Planning that existed from the early 1960s until the mid-1970s.

Recommendation: Implement a national spatial development framework

Good urban governance is a route to ensuring inclusive access to the benefits of urban life and a mechanism to protect human rights through supporting access to shelter, water, food, safety and more. The spatial governance landscape in Lebanon within which historically haphazard urbanization is unfolding is weak. An adopted national spatial development framework (DAR and IAURIF, 2005, decreed 2009) has not been implemented, leaving minimal strategic subnational coordination on how inevitably interdependent spaces with their attendant economies, infrastructures and services should be developed. Only around 15% of the territory is covered by decreed masterplans (Public Works Studio, 2018), virtually all of which fail to acknowledge the decreed national physical framework. In terms of governing urban development towards sustainability, the national level thus presents a policy vacuum in terms of implemented guidance. Whilst the decreed plan of 2009 has not been implemented, the precedent of such a framework is a valuable demonstration that endorsement of such a sensitive document is indeed within reach in Lebanon. It stands ripe for updating or rewriting and – to close the implementation gap - the design of supporting multi-level institutional architecture which to date has been absent.

Recommendation: Support municipality-led 'city partnerships' or similar voluntary fora to progress whole-of-city urban development

Whilst cities have been growing in land area and population, municipalities have been fragmenting. There were around 640 municipalities in 1998 (DRI, 2017) but over 1,000 today (IACL, 2021). In face of the need for whole-of-city approaches to strategic urban development, there are no city-level authorities to take ownership of the agenda, or to champion coordinated local input into national policy development. This represents an institutional vacuum for cities that are made up of multiple municipalities: the urban footprint of Beirut for instance spans 31 municipalities. Unions of municipalities (UoMs) which cover 63% of Lebanon's territory hold invaluable and growing expertise in strategic inter-municipal collaboration, but are not spatially configured to the reality of urban footprints on the ground.

Municipalities, UoMs and city stakeholders may consider mobilizing non-statutory 'city partnerships' to focus on issues where a whole-of-city lens adds value. Such voluntary alliances could be conceptualized in consultation with city municipalities and their UoMs, taking account of the incumbent institutions at local level, drawing particularly on the experience of UoMs as repositories of experience in inter-municipal collaboration.

Municipal finance

Recommendation: Explore mechanisms to support municipalities servicing a high proportion of households not registered to the municipality.

Among the ten cities, there is a wide range of nationality mixes, ranging from 52.4% Lebanese in Zahleh to 93.9% Lebanese in Jounieh. The main source of finance for most municipalities, the central government transfer, does not factor in Non-Lebanese who also use municipal services. Lebanese availing of services in a municipality who are registered to vote in an ancestral municipality rather than in their place of residence are also not factored in. Mechanisms stand to be explored to redress this imbalance, which may imply Lebanese electoral law reform, to improve alignment of central government municipal funding with the service needs of communities on the ground.

Recommendation: Build the capacities of municipalities to increase their financial self-sufficiency

Municipalities who have the capacity to collect local tax dues efficiently, to build private sector partnerships, to exploit their real estate assets and to bid for and steward donor funding stand to benefit from a diversified income and reduced reliance on unpredictable central government transfers. Innovations on these themes, as for others, could be readily shared through learning transfers between cities aimed at disseminated and scaling up good practice.

Economy and livelihoods

Recommendation: Identify spatial pockets of deprivation at sub-city level to target the furthest behind

The ten cities are spatial concentrators of both relative wealth and poverty to which district and governorate level

averages may be blind. Over half the cadastres making up each city (except Byblos) are amongst the 251 most vulnerable nationally as identified by IACL (2015), whilst all (against except Byblos) contain one or more of the most disadvantaged areas nationally as identified by UN-Habitat & UNICEF (2017). The ten cities have within their boundaries 11 of the country's 12 UNRWA Palestinian Camps with their poor quality housing and services. District averages such as those offered by CAS and ILO (2019) and indeed city averages such as those offered in the current report are blind to small-area concentrations of vulnerability which operationally challenges a 'leave no one behind' approach.

Recommendation: Recognize the criticality of good national and urban planning to economic development

Whilst urbanization is internationally correlated with economic growth, poorly managed urban growth formats that are inefficient in terms of energy and people's time is a deterrent. National policy is required to coordinate the type of inter-city and intra-city spatial development that harnesses urbanization for economic growth. Failure to match urban growth in the fast-growing second-tier cities identified in this report with adequate infrastructure and services investment including inter-city connectivity will mean that their role in contributing to spatially balanced development across the territory as envisaged in the Lebanese Constitution and National Physical Master Plan of the Lebanese Territory (DAR-IAURIF, 2005) will be compromised.

Housing; and housing, land and property (HLP) rights

Recommendation: Establish a data-led comprehensive national housing policy, aligned with a national spatial development framework, to support inclusive and sustainable housing provision.

Nationally, 61% of the urban population is estimated to live in slum-like conditions, up from 53.1% in 2014 (ESCWA, 2021a). Residential overcrowding has been shown to be up to 34% of households for Lebanese and 57% for Non-Lebanese in such neighbourhoods (UN-Habitat and UNICEF, 2017-2020). Around 50% of buildings in some of the most disadvantaged city neighbourhoods are in need of major structural repair (Ibid), presenting a collapse risk - potentially on a mass basis in face of a future seismic shock. A holistic national housing strategy that addresses both the renter and owner segments with a focus on widening access to affordable, adequate housing is an urgent if complex priority.

Recommendation: Improve understanding of the HLP rights of the most vulnerable, particularly women and Non-Lebanese, and formulate mitigation measures.

Lebanon has legislation that discriminates against certain groups in relation to the right to adequate housing, with foreign nationals and women particularly impacted. Entry points are further research into the HLP challenges of Lebanese households; and consideration of potential to centralise existing disparate yet highly valuable evictions tracking initiatives. The question of fundamental reform of cross-cutting legislation that indirectly affects HLP rights is also within scope.

Water

Recommendation: Undertake a comprehensive mapping of the water network as a basis for prioritizing technical fixes that reduce network losses and for addressing sub-municipality areas not connected.

City-scale analysis of the water sector is particularly challenging. Nationally, 82.3% of residences are connected to the national water supply network, though Baalbek El-Hermel governorate lags on this average at 69% (CAS and ILO, 2019). Technical losses in the network are estimated at 48% (2010, in Bassil, 2012). Water bill collection rates vary widely between regional water establishments – from 62% in Beirut Mount Lebanon Regional Water Establishment (RWE) containing Beirut City to only 18% in the Bekaa RWE covering Baalbek, Hermel and Zahleh cities (Fanack, 2015). There is a need for targeting technical fixes to address losses in the network as well as illegal connections through a comprehensive network mapping. There is also a need for mechanisms to encourage consumer water conservation, including by improving bill collection rates.

Wastewater

Recommendation: Expand wastewater treatment by designing pathways away from septic tank reliance towards networked solutions and by activating existing treatment plants and mobilizing funding for new ones

The release of untreated wastewater to the land and to water bodies presents a dire threat to public health and environmental quality. Only 8% of all wastewater is treated and, on 2012 figures, a significant 40% of buildings nationally were unconnected to the public wastewater network (Bassil, 2012). Two-thirds of households in Nabatiyeh governorate and over half in Baalbek-El Hermel governorate rely on a septic tank (CAS and ILO, 2019), associated with land and groundwater contamination. Within the selected cities, disadvantaged neighbourhoods that had been profiled showed up to 42.9% by street area with a malfunctioning wastewater network (a Jounieh neighbourhood). Similarly, buildings with blocked or no connection to the wastewater network reached 12.7% (a Tripoli neighbourhood).

Wastewater treatment plants (WWTPs) exist for eight of the ten cities. Of these, four WWTPs are operating below design capacity; one city is only partially covered (Beirut); and one (in Baalbek) is not operational at all. Two cities have no WWTP (Jounieh; Hermel) though one is under design for Hermel. Non-operational WWTPs should be re-animated, with necessary technical works and repairs to the plants and their feeder networks supported.

City municipalities reported the greatest degree of inter-municipal collaboration on wastewater management compared to other sectors, suggesting potential for enhancing city-level strategizing on the theme.

Solid waste

Recommendation: Focus community awareness-raising efforts on waste reduction and recycling on cities as the major generators of municipal solid waste.

Solid waste volumes are rising in Lebanon at a time of apparent ebbing governance capacity for effective management across successive administrations. The country's first Integrated Solid Waste Management (ISWM) framework law was passed in 2018, promoting the '4R' principles of 'Reduce, Reuse, Recycle and Recover'; seeking the closure of open dumpsites; advocating for increased reliance on sanitary landfill; and promoting waste-to-energy initiatives. It has not however been implemented. Recycling of municipal solid waste is minimal - RAWMEC has estimated that 8% is recycled (RAWMEC, 2021) and the functioning of some secondary sorting facilities has stalled (Tripoli, Saida). Ahead of implementation of the 2018 law, behavioural change at household level is required to reduce waste volume.

Recommendation: Coordinate the spatial aspects of solid waste management, particularly sink facilities, in alignment with a revised national spatial development framework.

It has been estimated that the country generates around 7,200 tons of municipal solid waste per day, of which 48% is land-filled and 29% openly dumped (RAWMEC, 2021). Lebanon's national spatial development framework offers a forum through which the siting of sensitive national facilities such as sanitary landfills can be mediated in the context of existing and planned land uses including transport connections spatially overlain with topography and geology factors.

Electricity

Recommendation: Explore opportunities presented by the current power supply crisis to trigger scaleable shifts to renewable energy sources, addressing immediate and longer-term needs.

Recommendation: Identify scope within the building code to foster increased energy efficiency in new buildings.

National challenges to households in regard to maintaining a consistent electricity supply at reasonable cost, navigating between public mains supply and private neighbourhood level generators, have been severely exacerbated in the current economic crisis with constraints on access to fuel curbing generation capacity at all levels. Investment in alternative decentralized green power technologies at both city and household levels, as well as updating building regulations to improve energy efficiency of structures may stand to support a sustainability agenda in the future.

Urban transport and mobility

Recommendation: Implement a national urban policy on transport, aligned with a national spatial development framework, to diversify the transport modal mix and reduce the environmental impact of the transport sector.

Urban transport in Lebanon is dominated by the heavily polluting private motor vehicle, with no harmonized conceptual framework or funding mechanism to guide a modal shift towards a more diversified split that includes mass public transit or to link transport connections to other sector policy themes like housing or economic development. A comprehensive regulatory framework combined with a programme of capacity building of relevant state entities is needed to raise awareness at national and municipal levels on best practices and to promote and implement public transport solutions. Sensitisation programmes are in parallel required to foster a culture change at the level of the public.

Recommendation: Maintain and increase urban densities and safeguard appropriately sited urban land to enable future public transport infrastructure investment.

Maintaining and increasing the population densities offered by cities - over 13,000 persons/km^2 in Tripoli and over 11,000 persons/km^2 in Beirut as calculated in the current report – are key long-term considerations to unlocking the business case for public transport infrastructure investment that is squarely within the purview of urban policy.

Public space

Recommendation: Undertake city-wide public space inventories to inform public space visions in the context of city-wide urban planning.

The share of each city analyzed in this report that comprises unbuilt space varies over a range of 56.8% (Zahleh) to 34.9% (Saida), though the usership of these spaces has not been comprehensively logged, including in terms of safety. Public space preservation and expansion is a key theme mobilizing CSOs in Lebanon in the context of historically weak state mechanisms to defend open space from urban development pressures. Conducting a city-wide public space assessment leading to formulation of an evidence-based public space strategy is a route that cities may adopt, and to which UN-Habitat has offered technical support elsewhere (UN-Habitat, 2015).

Health

Recommendation: Mainstream public health as an explicit urban planning objective and engage health stakeholders in urban planning decision-making.

The link between public health and urban basic services and infrastructure means that health benefits stand to be gained indirectly from improved urban management in Lebanon. This is in regard to issues including residential building quality and crowdedness, access to water and sanitation; transport modal shift towards low-emission and active mobility modes, solid waste management that avoids open burning; access to safe public spaces; regulation of street level hazards including hazardous power cabling. Urban planning activities should mainstream improved public health as an explicit objective.

Education

Recommendation: **Mainstream the spatial aspects of education in urban planning and engage education stakeholders in urban planning decision-making.**

The education sector in Lebanon is characterized by poor attainment levels and inequitable access, particularly affecting Non-Lebanese students, with deteriorated buildings and teaching staff shortages particularly affecting the public school sector. The current economic crisis combined with the effects of COVID-19 has led to 15% of households keeping their children out of school (UNICEF, 2021).

Education is a key public service underpinning city prosperity and wellbeing generally and the inclusivity of economic growth in particular. Education can improve people's ability to advocate for their rights to basic services. Educational facilities are a significant component of the urban built environment with multi-sectoral urban planning interactions spanning transport, housing and open space. Education should be factored into all discussions on urban development, in terms of gap-filling provision relative to proximate population need; and spatially identifying future education needs entailed by projected population growth.

Safety and security

Recommendation: **Address gaps in access to basic urban services and utilities to support social stability**

Whilst susceptible to international and national influences, safe and secure cities can partly be fostered through good urban management and planning, which includes trusted urban leadership through strong local authorities.

In Lebanon, competition for services and utilities is one source of community tension, perceived by resident communities as particularly important in Baalbek district, where 67% of survey respondents cited it as a source of tension (ARK and UNDP, 2021). To the extent that perceived inequalities in urban services and infrastructure access is a source of community unrest, state or aid-led interventions in these sectors should programme in some form of social stability risk assessment as standard.

Human rights and inclusion

Recommendation: **Proof existing and new urban planning policies against human rights norms to benchmark their compliance and identify entry points for improving inclusion.**

A human rights agenda is consistent with social inclusion, which is recognized in the New Urban Agenda (UN-Habitat, 2017a) as a marker of quality urban planning. Whilst human rights interfaces are identified across the sectoral chapters of the report, a selective focus possible within the scope of the current report highlighted that Lebanon shows significant gender parity gaps – particularly in terms of female economic participation where it ranked 139 out of 156 countries (World Economic Forum, 2021) as well as deficiencies in the participation of persons with disabilities in society, with a 2011 Accessibility Code remaining unimplemented.

The conceptual model of the 'Human Rights City' (ESCWA, 2021a) where human rights principles are mainstreamed into cities' governance norms may be drawn on to benchmark current and future policy approaches in Lebanon's cities, noting that some city municipalities already report collaboration on human rights issues in the municipal survey undertaken for this report.

Recommendation: **Undertake regular gathering of data disaggregated by gender, age and disability as well as by urban and rural location to support targeting and monitoring of programming in terms of human rights.**

Ensuring that urbanization increasingly supports human rights in Lebanon would require the regular collection of relevant data disaggregated by gender, age and disability as well as by urban and rural locations. The optimum scenario for ensuring reliable time series data is that such data-gathering is formally instituted as part of a systematic cycle coordinated by a capacitated Lebanese national statistical system designed to support social inclusion.

Heritage and culture

Recommendation: **Formulate a national tourism strategy that incorporates the role of cultural and creative industries, and that supports the territorial rebalancing approach of the Lebanese Constitution and national spatial development framework (NPMPLT).**

A 2018 estimate suggested that tourism generated 7% of GDP (IDAL 2021), with cultural and creative industries contributing 5% to national GDP at 2015 (UNIDO, 2015). The inextricability of cities' cultural heritage and creative economies from their built fabric drives an imperative to frame policy treatments and interventions in holistic, multisectoral and area-based strategies. According to the municipalities questionnaire undertaken for this report, municipalities within cities are already collaborating to capitalize on the potentially shared benefits of spatially linked heritage preservation and tourism.

A spatially referenced national tourism strategy with city chapters is warranted in light of the existing and potential importance of this sector in Lebanon to its economy and indeed to wider civilization. This should be consistent with the decreed NPMPLT (DAR and IAURIF, 2005) which earmarked tourism as an internationally competitive comparative advantage that can be harnessed to rebalance development across the Lebanese territory towards a more polycentric format, with potential anchors on the inland historic cities of Baalbek and Tyre.

Environment

Recommendation: Leverage the environmental dividends of good national and urban planning to advocate for the implementation of a national spatial development framework, and secure full engagement of environmental stakeholders in its design.

Environmental risk factors linked to urban sprawl and green space loss, water pollution, partial wastewater network coverage, solid waste mismanagement, car-based mobility, and dependence on non-renewable energy sources are highlighted across the report as concerns integral to sustainable urban development.

In addition to a set of environmental topics identified as within the scope of influence of the NPMPLT (DAR-IAURIF, 2005), Lebanon's Strategic Environmental Assessment Law (2012) and Environmental Protection Law (2002) are amongst existing levers through which the environmental performance of cities may be supported, though implementation and enforcement appears limited to date. City municipalities in Lebanon surveyed for this report indicated intra-city collaboration on a small number of environmental issues, namely air quality, water pollution and, to a lesser degree, urban encroachment into natural ecosystems.

Cross-cutting recommendations

Recommendation: Adopt an urban lens onto sustainable development in Lebanon as a country of cities

It is recommended that sustainable development in Lebanon be explicitly viewed by decision-makers and stakeholders through an area-based urban lens as a starting point for multisectoral, multi-partner coordination. In this highly urbanized country, sustainable development depends on progress in cities; conversely, a lack of progress in cities presents barriers to SDG attainment and on many fronts also violates human rights, such as the right to shelter, water and health.

Recommendation: Link humanitarian and recovery approaches through urban diagnosis and planning

The current compounding economic, political, refugee and health crises affecting Lebanon are generating acute humanitarian stresses that in many ways have roots in longstanding structural weaknesses. It is well acknowledged that the longer-range impacts of immediate responses to emergency needs stand to be enhanced when undertaken within a recovery-oriented framework that seeks to strengthen national systems. Conversely, the efficacy of short term strategies cannot be fully understood without viewing them within a future framework.

Urban planning generates and uses area-based data that can support equity and public interest-oriented decision-making in cities. It highlights where vulnerable communities are and their interface with infrastructure and basic urban services. In the wake of the Beirut Port explosions, the Beirut City Profile (UN-Habitat, 2021a) highlighted the importance of factoring in early consideration of medium and longer-term urban recovery directions and, within that, the value of urban planning following humanitarian crisis in empowering communities and local governments to manage their own recovery. In the same vein and more widely, the current Emergency Response Plan for Lebanon (OCHA, 2021:5) actively emphasizes the interface between humanitarian and recovery activities and the need for structural reforms and development initiatives led by the government.

As a step towards elaborating that approach, the report offers a multi-sectoral diagnosis on ten of Lebanon's cities, highlighting the diversity of baselines that stands to be reflected in context-sensitive international and national assistance initiatives as well as in national policy.

Recommendation: Generate demographic and multisectoral data in ways that can support an inclusive urban agenda

Necessary - though not sufficient - for progress towards sustainable urban development is a clear understanding of inter-urban and intra-urban dynamics.

A patchwork of primary and secondary data has been overlain to characterize the ten selected cities in this report, based on unofficial city boundaries. Whilst the exercise has shown that a great deal of relevant information exists, the data landscape is characterized by inconsistent coverage, lack of time series datasets, ambiguous data points, varying conceptions of the geographic city unit; and is commonly out of date.

Good urban planning and management requires data to support salient programming, monitoring and coordination and to identify the furthest behind communities. Official data, particularly that collected through or in coordination with the government's Central Administration for Statistics (CAS), is required to support accurate planning of services and infrastructure and other aspects of spatial planning. In line with UN statistical data system standards (UN Statistics Division, 2021), disaggregated data is a prerequisite for rendering cohort, household and community-level inequalities visible and for designing and evaluating programmes that are inclusion-oriented and support human rights.

Recommendation: **Establish fit-for-purpose institutional structures and policies for governing space and cities**

The current report identifies governance and policy gaps relating to territorial and urban coordination and planning. In response, the following recommendations emerge:

- Re-establish a central public entity to coordinate spatial activities of the range of line ministries, capitalizing on synergies and providing mediation for resolving flashpoints
- Execute the operationalization-oriented steps that were officially agreed as part of the NPMPLT decreed in 2009, and update the NPMPLT's substantive assumptions;
- Foster empowered municipalities who have the fiscal space and administrative autonomy not only to look inward and deliver on their local mandates, but also to look outward and collaborate strategically at whole-of-city level;
- Identify good practice and ways to scale up innovations in public participation in urban planning that are taking place outside of official regulatory requirements, such as that proceeding as part of donor funding requirements;
- Embark on steps towards a rescaling of urban governance to the whole-of-city level, pragmatically motivated by the technical need to respond holistically to strategic city issues at the right geographical scale. City municipalities and their stakeholders may consider establishing non-statutory 'city partnerships' aligned to cities' urban footprints as an early option. Partnerships could be led by municipalities as the only decentralized limb of government, and as a state entity that benefits from relatively high public trust relative to other entities. They would draw on existing experience of inter-municipality collaboration, particularly that through Unions of Municipalities (UoMs). The onus - and opportunity - would then fall to these flexible, area-based strategic alliances to demonstrate internally and to the wider policy community their added value using sustainable urban development indicators and/or other tailored performance indicators. Such voluntary city partnerships could drive policy momentum for more formalized governance rescaling to the city unit in the future.

Recommendation: **Capacity-building of city municipalities to contribute to more sustainable urban development**

Drawing on the city municipality questionnaire undertaken as part of this report, it is highlighted that municipalities perceive funding constraints and limited decision-making autonomy in a centralized governance system as key barriers to implementing their visions of sustainable development - insights which may add to ongoing local to central government advocacy on that theme. Other barriers potentially susceptible to capacity-building measures were the absence of a diagnostic baseline of information on city status and needs, and the 'inability of municipalities in the cities to collaborate'. These and other barriers presented city-by-city in this report offer an initial diagnostic guide to tailoring capacity-building programmes to individual cities.

Procedurally, the soft 'city partnerships' recommended above could support on contextualising the design and implementation of short term crisis responses whilst also acting as nodes for city-to-city learning networks, through which cities and their constituent municipalities and stakeholders can build their knowledge and awareness of good practices and efficiency-enhancing innovations. The report has identified sectoral themes that city municipalities are already progressed at collaborating upon strategically, such as solid waste and waste water; and those that have yet to be collaborated upon, such as urban encroachment into ecological spaces. Such capacitated municipalities, 'city partnerships' and city-to-city learning networks stand to become transformative area-based coalitions at the right scale to catalyze localization of a range of SDGs and to realize more sustainable urban development in Lebanon.



Photo in Tripoli. ©Ahmad Chinder, 2021

UN-Habitat mandate

The United Nations Human Settlements Programme (UN-Habitat), is mandated by the United Nations General Assembly to promote socially and environmentally sustainable cities and towns, and adequate housing for all. It is the focal point for coordinating urbanization and human settlement matters within the UN system. UN-Habitat's global responsibilities in emergency, humanitarian and post-crisis response are to support national and decentralized governments as well as civil society in strengthening their capacity for managing human-made and natural disasters affecting human settlements.

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ESCWA mandate

ESCWA is one of five regional commissions under the jurisdiction of the United Nations Economic and Social Council. The mandate of ESCWA has evolved over time. Having started as ECWA, dealing only with the economic dimension of development, it was renamed ESCWA in July 1985 in recognition of the social component of its work to reflect the multidimensional nature of the sustainable development effort. Environmental concerns have also become part of the Commission's mandate, allowing it to offer a full range of services through an integrated and multidisciplinary approach that reflects the universal needs of people and the planet.

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Disclaimer

Forewords

President of the Council of Ministers of the Lebanese Republic

At this time of extreme socio-economic and fiscal crises converging on Lebanon, the Government is focused on the utmost urgency of finding domestic routes and international support to alleviate the acute and growing stresses on households across the country. At the same time, the Government remains committed to finding ways to coordinate immediate actions with longer term goals, particularly within the framework of the Sustainable Development Goals (SDGs), so that immediate measures to mitigate needs can also feed into building back better for the future. Work with the Parliamentary SDG Committee to this end is ongoing. Lebanon's cities are where most of its people live, and we continue to look to them as drivers of progress and prosperity. Cities are also the settings where human needs is concentrated. Access to adequate housing, water and sanitation, solid waste management, energy and mobility has long been constrained in Lebanon. These basic services have been emphatically highlighted as critical to public health and well-being since late 2019 in the context of Lebanon's COVID-19 outbreak as well as its monetary crisis and fuel shortages. The damage to the capital city caused by the Beirut Port explosions of August 2020 has emphasized the complexity of the city and the need for multisectoral, data-led urban planning for recovery that also builds the resilience of urban systems. The Government values the efforts of the UN in outlining an urban agenda for Lebanon in line with the SDGs, and in supporting the Central Administration of Statistics in its work including towards institutionalizing urban boundaries for Lebanon so that we can better understand, plan for and monitor our cities. In this context, the United Nations Human Settlements Programme (UN-Habitat) and the United Nations Economic and Social Commission for Western Asia's *State of the Lebanese Cities* report is welcomed to support municipalities, ministries and other entities in evidence-led planning for cities in Lebanon that harnesses their potential to realize more sustainable development.

Najib Mikati

President of the Council of Ministers

United Nations Human Settlements Programme and the Economic and Social Commission for Western Asia

The United Nations Human Settlements Programme (UN-Habitat) and the Economic and Social Commission for Western Asia (ESCWA) are pleased to collaborate with the Government of Lebanon in presenting the first *State of the Lebanese Cities* report. Lebanon is a globally significant site of ancient urban civilization, and home to the oldest continuously inhabited city in the world, Byblos. Today, cities remain vital to the daily lives of communities in Lebanon, with 9 out of 10 people living in urban settings. Lebanese cities are growing rapidly - up to seven-fold in land area over the last 30 years. However, access to affordable housing with tenure security, water and sanitation, transport and other basic services varies widely between and within Lebanese cities, with the poorest neighbourhoods and households experiencing dire multidimensional deprivation. The 1.5 million refugees arriving in Lebanon since 2011 have inevitably added pressure on already overstretched public services and resources, particularly affecting urban areas where the majority have settled. Moreover, the COVID-19 outbreak in Lebanon, a severe and deepening economic depression and currency devaluation since 2019, and the effects of the Beirut Port explosions in mid-2020 have together driven an overwhelming 74 per cent of the population into income poverty in 2021, up from 25 per cent in 2019. More than ever, there is an urgent need to address disparities in Lebanese cities, and to uphold people's human rights to housing, water, sanitation and other essential services and resources. Such efforts require good urban governance – including at the scale of today's expanded cities - that responds to immediate multisectoral needs while also working towards a recovery vision supported by national urban policies as part of strengthening national systems and leaving no one and no place behind. The challenges are immense - yet the alternative is bleak.

The *State of the Lebanese Cities* report promotes ongoing efforts to implement the Sustainable Development Goals in Lebanon by providing city-based evidence and analysis that help us better understand and anticipate the local specificities of rapid urbanization, and that guides us towards building back better in contextually responsive ways. The report is expected to inform future operational frameworks between the Government of Lebanon, the United Nations family in Lebanon, the wider development community and other stakeholders, and to support progress towards an increasingly sustainable urban future for Lebanon.

Maimunah Mohd Sharif

Executive Director

UN-Habitat

Rola Dashti

Executive Secretary

UN ESCWA

Introduction



Photo of Tyre. ©Ahmad Chinder, 2021

Introduction

The urbanization phenomenon and its dual character

Urbanization, or the mass movement of people from rural to urban settings, is 'one of the global megatrends of our time, unstoppable and irreversible' (UN-Habitat, 2019:7). It has continued apace since 2009 when 50% of the world's population became urban, a figure anticipated to rise to 68% by 2050 (UNDESA, 2018a). Urbanization has been associated with human development and prosperity but also with spatial concentration of inequalities (Edwards, 2002) - particularly where it occurs without parallel infrastructure construction, services expansion and social supports (Kuddus et al, 2020) - and with environmental degradation. Acknowledging the inexorable trajectory of urbanization and its tendency to geographically concentrate both wealth and vulnerability, the success of national and local governments to strategize for and deliver adequate urban infrastructure and services will determine the quality of life and resilience of current and future generations.

Urbanization as a force for sustainable development

> 'It is in cities where the battle for sustainability will be won or lost.'
>
> *UN Deputy Secretary-General (UN, 2017a).*

Rapid urbanization of people and economies means that special attention must be paid to the interface between cities and sustainable development. Cities generate 80% of global GDP, but also consume 70% of global energy and produce 70% of human-induced carbon emissions (UN-Habitat, 2018a:18). However, the spatial concentration of people and their production and consumption activities in cities presents opportunities for economies of scale that make infrastructure and service provision less costly on a per capita basis. Dense urban settlements are more resource efficient, requiring less land, roads and utility lines per person for a given level of service than lower density cities (UN-Habitat and EU, 2016:140). Population density thresholds are particularly relevant to the business case for public transport infrastructure investment. The lower per capita land consumption of dense settlements is linked to reduced pressure on non-urban land uses at the urban periphery or indeed on open space within the city perimeter. The World Bank, EU and UN (UNGA, 2016: para. 51) converge on the desirability of high density compact spatial structure - as opposed to uncontrolled urban sprawl at relatively lower densities - as a format for improving the sustainability of urban growth. Urban compactness is generally accepted as a mainstream goal for urban policy (Simon, 2016:18).

The 2030 Agenda for Sustainable Development (UN, 2015) with its aim of eradicating poverty globally by 2030 and its set of common sustainable development goals (SDGs) recognized the special role of cities in progressing towards more sustainable development by adopting a so-called 'urban' goal, SDG 11: 'Make cities inclusive, safe, resilient and sustainable'. Whilst sustainable development has from the outset been a contested term resistant to operational definition,[1] SDG 11 presents a set of concrete targets towards which countries and cities may direct efforts. Several of the other SDGs directly or indirectly depend on action in or by cities. The current report incorporates scorings on selected indicators under SDG11 and other SDGs where data is available.

Sustainable cities are those that:

- Facilitate social and environmental equity
- Promote the physical and mental health of its inhabitants
- Maintain a sense of community and place
- Build and restore ecological services' *(Platt, 2006)*

Urban planning as a mechanism for sustainable urban development

Spatial planning is the coordination of practices and policies influencing spatial organization, aiming to regulate the amount, type and location of land uses linked to specific socioeconomic activities. The ambition is to balance developmental pressures with social, economic and environmental objectives in the public interest (UN-Habitat, 2019). The New Urban Agenda (UN-Habitat, 2017a) highlights spatial and urban planning strategies as holding the power to transform cities, promote sustainability and build resilience.

Spatial planning is an inherently area-based activity, inter-scalar in scope as every space exists-in horizontal and vertical (hierarchical) relation to another, a characteristic that accommodates the global-local dualism at the centre of sustainable development.

Spatial planning is at once a technical and political endeavour, as a given land use tends to privilege one set of activities and stakeholders to the exclusion of another

1 The seminal definition of sustainable development is 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs' (WCED 1987: 23).

set. Decision-making should be participatory, '...taking into consideration all segments of society (which) can help to advance sustainable solutions for the benefit of all.' (UN-Habitat, 2019).[2]

Further, the medium to long-term time horizons typically adopted in spatial and urban plans present a frame that encourages building longer-term sustainability concerns into short-term actions - including responses to sudden crises. This is at the heart of the 'build back better' tenet, popularized in the Sendai Framework on disaster risk reduction (UNDRR, 2015) which encourages 'resilient recovery' following crises in ways that meet essential needs but in parallel also strengthen pre-existing systems and resources. In this sense, a long-term urban planning lens changes the way we consider crisis response.

Evidence-led urban planning

A hallmark of good land use planning - as much as built environment outcomes – is evidence-led programming. Combined with the abovementioned participatory processes, evidence-led decision-making enables context-sensitive identification of barriers to and opportunities for improving sustainability, leading to resonant actions that work with local specificities. The steps of strategic urban planning typically include (UN-Habitat, 2007; 2021h):

- Assessment or situational analysis
- Plan-making
- Operationalization
- Implementation and evaluation

The current report offers an initial contribution to the 'assessment' phase of the planning process, where it may help guide the necessary range of further detailed diagnostic studies. For each of the ten main cities in Lebanon, it provides evidence on the differential baselines across key multisectoral dimensions spanning economy and housing, infrastructure and services, culture and environment and more. Each city is different and faces a unique permutation of challenges to developing sustainably. The diversity of urban realities that city-level planning policies must negotiate are thus highlighted, and national planning policies must accommodate locally responsive flexibility.

Urban Lebanon

> 'Standing on nearly 5,000 years of history, Lebanon is home to four[3] of the twenty oldest cities in the world' *(Petri= 2017)*. Today, Lebanon endures as a country of cities.

Lebanon is highly urban by population. The 1975-1990 Civil War period witnessed the steepest rise in population urbanization in recent history, during which the share of the population in urban settings rose remarkably from 67% to 83.1% (UNDESA, 2018b). This figure has been estimated to have risen to 88.9% by 2020 (Ibid). Whilst recent UN estimates anticipate a drop in Lebanon's total population from 2019 onwards (Ibid) in the context of a series of compounding crises bearing on the country, it yet remains that the urban share of the population is projected to continue to climb to reach 90.6% by 2030 (Figure 1).[4]



Photo in Beirut. ©UN-Habitat, 2018

2 'UN-Habitat (...) promote(s) consultative mechanisms, that include migrants, refugees, internally displaced persons and returnees, and (aims to) ensure that such mechanisms include a focus on children, women, youth, older persons and persons with disabilities. (UN-Habitat, 2019).

3 Byblos, Saida, Beirut, and Tyre.

4 For comparison, the urban population percentages at 2019 and 2030 (projected) are respectively: World: 55.7%; 60.4%; Upper middle income countries 67.4%, 74.8%; Lower middle income countries 41.1%, 47%; Western Asia 72%, 75.4%; Jordan 91.2%, 93.2%; Syrian Arab Republic 54.8%, 61.7%; Iraq 70.7%, 73.6% (UNDESA, 2018b).

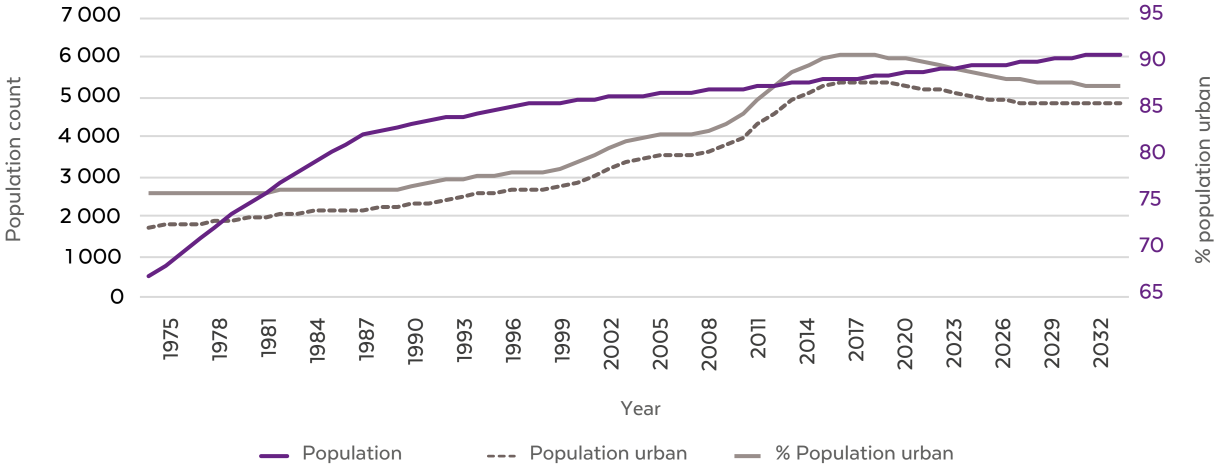


Figure 1 Historic and projected total population, urban population and percent urban population in Lebanon 1975-2034, as at 2018. *Source:* United Nations, Department of Economic and Social Affairs, Population Division (2018).

Lebanon's compounding crises - acute and chronic

Lebanon is an increasingly fractured and dysfunctional country in a protracted state of mass displacement. As at late 2021, the country is in the grip of mutually reinforcing crises that are both acute and structural in their origins and trajectories. The crises have variously exposed and exacerbated existing socio-spatial vulnerabilities.

The rapid and largely unplanned urbanization over the last four decades and more has been characterized by growing deficiencies in housing, infrastructure, basic services, social services and livelihood opportunities, all manifesting in a confessionally structured, politically tense governance environment that has long featured waves of sectarian tension and conflict. Rapid urbanization over the 1975-1990 Civil War period continued into the 1990s and beyond, with Palestinian camps established on urban peripheries since the 1940s increasingly subsumed - in terms of economic interactions and built fabric[5] - into the expanding cities as poor urban neighbourhoods. Around half of the estimated 0.18m Palestinians in Lebanon and 0.043m Palestinians from Syria displaced since 2011 live in the Palestinian camps.[6] Pressure on urban systems were exacerbated by the displacement into Lebanon of 1.5m Syrian refugees since 2011, 78% of whom are located outside informal tented settlements (UNICEF, UNHCR and WFP, 2021), and mainly in poor urban neighbourhoods alongside host communities. The post-2011 influx rapidly increased the population density of the country; from 2011 to 2014, the government noted a national density spike from 400 persons per km^2 to 520 persons per km^2.[7] Densification put pressure on host community systems already under strain including through 'more waste generation, water and sanitation problems, more vehicles and scooters on the roads, noise pollution, and crowdedness' (MoE, 2014:9). In the terms of SDG Indicator 11.1.1, an estimated 53.1% of the urban population were living in slum conditions in 2014; by 2018 this figure had risen to 61.1% (ESCWA, 2021a).

From late 2019, mass protests in the face of economic stagnation and perceived government corruption erupted in cities across the country, with the onset at that time of what has since emerged as a banking system crisis and devastating local currency devaluation that has driven an estimated 82% of the population into multidimensional poverty,[8] skyrocketing from 42% in 2019 (ESCWA, 2021b). More narrowly, income poverty has been estimated to have shot up from 25% of the population in 2019 to 55% in 2020 and to a dire 74% by 2021 (Ibid).

The impact of COVID-19 and associated lockdown measures from early 2020 threw into stark relief the public health implications of poor housing and residential overcrowding as well as inadequate water, sanitation and hygiene access in Lebanon as in other locations with slum-like neighbourhoods across the world. This was followed by a deadly chemical explosion at the Port of Beirut in August 2020 which caused well over 200 fatalities and

5 This integration is notwithstanding longstanding labour market access restrictions on Palestinians (although restrictions on Palestinians and certain other groups to work in some sectors previously reserved for Lebanese were lifted by the Labour Minister in December 2021 (Reuters, 2021) and official limitations on public utility and services connections between Palestinian camps and Lebanese state networks.

6 The 2020 LCRP population package (IACL, 2020; used in the 2021 LCRP (GoL and UN, 2021) assumes just over 45% of PRL and just under 45% of PRS live in Palestinian camps. These figures take into account the findings of the Population and Housing Census in Palestinian Camps and Gatherings in Lebanon 2017 (LPDC, CAS and PCBS, 2019).

7 For rough comparison, the density of Jordan is 115 persons/km^2; Belgium 383, Haiti 414, Netherlands 508, Mauritius 626 (Worldometer, 2021). Population density figures for Lebanon are particularly rough and vary between sources due to the use of disparate total population figures.

8 Multidimensional poverty index takes into account education, health, public utilities, housing, assets and property, employment and income. This is as opposed to just income as a one-dimensional measure of poverty (ESCWA, 2021b:3).

extensive damage to the capital's built environment and its economic, housing, logistics and heritage functions. New depths of currency devaluation led to the collapse of the government in August 2020. Whilst a new government was formed in September 2021, calls for accountability regarding the Beirut Port explosion have led to its paralysis in the last quarter of 2021. At time of writing, the country is in a spiral of socio-economic implosion; acute poverty is rising dramatically with plummeting health, medication and food security particularly affecting the poorest neighbourhoods; the long intermittent public power supply is down to two hours per day in places, access to fuel is acutely constrained and there are critical shortages in even basic medical supplies.

The current compounding economic, political, refugee and health crises affecting Lebanon have profound socioeconomic implications that are spatially concentrated in cities reflecting Lebanon's urbanized population distribution. With declining economic activity and widespread political instability since 2019 (ESCWA, 2021b), more people are being pushed further into poverty at the same time as severe challenges are emerging on the supply side of key urban infrastructure and services, including housing, power, water, solid waste, mobility. A progressive scale-back is in motion of blanket subsidies on basic goods including fuel, medicine and several essential food items in the virtual absence of a social safety net. The series of crises have further constrained the capacities of subnational government to provide infrastructure and services and plan for the future, pushing to the fore the chronic underfunding of the local government tier (DRI, 2020).

A 2021-2022 Emergency Response Plan for Lebanon has been produced (OCHA Lebanon, 2021). It is a short-term humanitarian plan aiming to deliver support to Lebanese and others in complement to the pre-existing Lebanon Crisis Response Plan (GoL and UN, 2021).[9] It is well recognized at national and international community levels that the only plausible route out of the current crisis is one that seeks structural improvements in infrastructure, services and other national support systems to bolster resilience against future shocks at the same time as meeting immediate needs. Indeed, medium and longer-term critical reforms relating to the macro-economy, governance, electricity and anticorruption measures have long been a condition for the release of potential foreign assistance beyond humanitarian aid to Lebanon, including in the context of the reform and reconstruction 'Track 2' element of the Lebanon Reform, Recovery & Reconstruction Framework (EU, WB and UN, 2020) following the Beirut Port explosions of August 2020. The series of challenges at hand have also reignited ongoing debates about the need to bolster local government capacities, and to clarify implications for municipalities of the longstanding administrative decentralization debate in the country.[10]

Report purpose

An urban lens onto bridging humanitarian and development approaches

Faced with the complex humanitarian and development challenges outlined above, why is it important to consider the state of Lebanon's cities and their future planning? 'State of cities' reports are a means to highlight and monitor the role of cities in sustainable development in an urbanizing world. They have been produced by UN-Habitat at global,[11] regional and national scales as well as by other bodies including the European Union, the Commonwealth Secretariat, National League of Cities and Cities Alliance. This State of the Lebanese Cities report aims to give prominence to a territorial approach for coordinating sustainable urban development delivery – particularly at the local level where contextually contingent spatial planning, execution and monitoring takes place in ways that factor in the unique dynamics and priorities of each city. In the current 'Decade of Action' (UN, 2020) to achieve the ambitious UN Agenda 2030 Sustainable Development Goals, sustainable forms of urbanization are central to progress globally and across almost all of the goals.

Lebanon's cities manifest stress dynamics that are at once acute and chronic in their genesis and trajectory, and accordingly require responses that integrate mutually reinforcing short and longer-term approaches. In the immediate term, the formal and informal institutions, built infrastructure and services, resources, local markets and human capital already present in urban systems – even if weak – stand to be harnessed as part of the humanitarian response in ways that simultaneously advance development aims, potentially leaving a legacy of more resilient cities for the future (WHS Urban Expert Group, 2015). Urban planning, concerned with both the processes of planning – like data-gathering and participation - as well as built outcomes (Huxley, 2009), can help host and displaced communities and governments manage their own transition from emergency through to recovery (Maynard et al, 2017). The mosaic of authorities with various mandates for managing cities – sometimes competing and typically influenced by prevailing social tensions and conflict – are parts of the wider city system that must be engaged in any urban humanitarian and development response to draw in local knowledge and contacts, and are often already the first responders in acute

9 The LCRP (GoL and UN, 2021) is the annually updated framework adopted to address the impact of the Syrian crisis on Lebanon and is the Lebanese country chapter of the wider Regional Refugee & Resilience Plan (3RP) that was first instigated in 2015 (UNHCR and UNDP, 2021).

10 An Administrative Decentralization Bill tabled in 2014 is the most recent step in the decentralization debate, though it has not progressed. It does not contain an explicit agenda for municipal reform and instead is focused on bolstering the district level. Decentralization was an element of the 1989 'Taef Agreement' linked to the end of Lebanon's 1975-1990 Civil War. To date, administrative decentralization has technically taken place at municipal level only, though its scope is contentious. A useful summary is provided by Baroud (2021).

11 UN-Habitat's World Cities Report 2020 (UN-Habitat, 2020) recommended that all countries undertake a state of cities report.

situations (Sanderson, 2019). Conversely from a 'do no harm' angle, 'the exclusion of development perspectives in immediate humanitarian response can impede long-term recovery' (WHS Urban Expert Group, 2015), including by recreating risk, generating additional vulnerabilities (March et al, 2017), or otherwise compromising the development trajectories of cities as engines of sustainable development (Duranton, 2008).

In a country as small and densely populated as Lebanon where an overwhelming 88.9%[12] and rising of the population lives in cities and towns, many critical humanitarian and development challenges faced by communities must be addressed through an urban lens. A collective challenge for governments as well as humanitarian and development actors alike in cities, then, is to identify and take maximum advantage of the resources and capabilities present in the urban environment, helping to restore and strengthen them in the response process. Working effectively with the grain of cities as the objects of urban planning depends on a holistic, spatialized understanding of their governance and built anatomy. A sound knowledge basis supports the design of impactful targeting, programming and coordination when it comes to mitigating urban vulnerabilities and planning for economic and social development.

This report presents geographical, multisectoral data and analysis on urbanity in Lebanon overall and its differentiated manifestations within the ten main cities.[13] It highlights key urban trends and implications for governance, identifying entry points for mitigating challenges and capitalizing on opportunities across a range of key sectors, spanning governance, economy, infrastructure and services, safety and security, inclusion, heritage and the environment.

The report aims to support sustainable urban development progress outlined in the New Urban Agenda (UN-Habitat, 2017) in Lebanon. This is by using city boundaries (see next section), as a cross-sector common frame within which urban characteristics can be researched and measured including dynamics under scrutiny as SDGs; and by providing city-specific contextual data that humanitarian and development actors as well as state entities may use for evidence-based programming and coordination.

Urban boundary-setting for coordinating sustainable urban development

Identifying national urban/rural boundaries is critical to monitoring and managing spatial development and to understanding a range of socioeconomic measures. Official statistics should be possible to disaggregate along urban/rural lines (UN Statistics Division, 2021). Several of the SDGs require urban/rural disaggregation or are measured at city level (Annex 1). The Government of Lebanon through its Central Administration for Statistics (CAS) is currently working on producing nationally comprehensive urban/rural designations to feed into an official spatial statistical framework.

The current report adds weight to the important CAS initiative by piloting how provisional urban boundaries for a selection of ten cities[14] can be used to frame multisectoral analysis of the type relevant to sustainable urban development.[15]

The boundaries are defined by cities' continuously built up land areas rather than on historic administrative city boundaries which have in many cases been surpassed by urban expansion on the ground; the continuously built up cities thus represent geographic development units without dedicated institutional or administrative levers. This boundary delimitation approximates to the UN definition of an urban agglomeration – 'A type of urban settlement defined by the de facto population contained within the contours of a contiguous territory inhabited at urban density levels without regard to administrative boundaries' (UNDESA, 2018b). Linked to these city boundaries, groupings of municipalities and population estimates per city are then identified.

For humanitarian and development actors, the city boundaries present a geographical unit within which area-based integration of sectoral programming and coordination can be considered.[16] For municipalities[17] as de facto multisectoral area-based managers, the boundaries indicate the minimum number of municipalities who are part of each city and thus stand to benefit – in partnership with other stakeholders - from intra-urban cooperation.

Audience

This report is targeted at both specialist and non-specialist urban stakeholders, spanning government and humanitarian-development organizations, as well as community, private sector and academic partners. It aims to offer an evidence basis useful to entities engaged in influencing and making decisions related to urban management and planning. The report is also intended as a springboard for sensitization and capacity-building of municipalities and other entities involved in alleviating

12 This compares to an average of 71% for West Asia (2018) (UNDESA, 2018b).

13 See Methodology section for city selection rationale.

14 In the current report, the term 'city' is used to describe all ten selected urban concentrations. No attempt to differentiate between city, town and village designations has been made.

15 The approach is consistent with that underpinning city profiles produced for Tripoli (UN-Habitat, 2016; 2017), Tyre (UN-Habitat, 2017) and Beirut (UN-Habitat, 2021).

16 Former Assistant Secretary General of UN-Habitat (Kacyira, 2015) stated, 'the people we serve live profoundly integrated lives. Our challenge is to respond with equally integrated environmental, economic, and culturally sensitive responses'.

17 The 'World Cities Report 2020: The Value of Sustainable Urbanization' (UN-Habitat, 2020d) viewed local government as the entity most likely to push forward progress on the New Urban Agenda (UN, 2017).

vulnerabilities among city communities and working towards a better urban future in Lebanon. This report aims to offer a knowledge product feeding into the design in 2022 of a joint UN-Government of Lebanon United Nations Sustainable Development Cooperation Framework (UNSDCF), advocating for an urbanization agenda therein.

Alignment with relevant frameworks

This report is aligned with the United Nations 2030 Agenda for Sustainable Development (UN, 2015) with its Sustainable Development Goals (SDGs) and supports efforts surrounding the 'Decade of Action to deliver on Sustainable Development Goals by 2030' (UN, 2020). It also aligns to the New Urban Agenda (UN-Habitat, 2017) with its focus on accelerating progress in cities on SDGs generally and SDG 11[18] specifically. It is attuned to UN-Habitat's Strategic Plan 2020-2023 (UN-Habitat, 2020)[19] with its four 'domains of change':

- Reduced spatial inequality and poverty in communities across the urban - rural continuum
- Enhanced shared prosperity of cities and regions
- Strengthened climate action and improved urban environment
- Effective urban crisis prevention and response.

The report is also in line with UN-Habitat Lebanon's Habitat Country Programme Document 2021-2023 (UN-Habitat, 2021).

Report structure

Methodology:

The chapter specifies the primary and secondary data sources drawn together to diagnose the national and city-by-city state of urban Lebanon across themes relevant to sustainable urban development. The city municipalities' questionnaire on inter-municipal collaboration is described. The approach to selecting the ten cities studied is outlined. By way of methodological contextualization, the Lebanese data environment is described.

City dashboards:

A series of standalone 'city dashboards' detailing governance, space, population and sectoral data for Lebanon's ten main cities are presented. As mini-city profiles, they allow a rapid overview of each city, aimed at facilitating city-specific deliberations amongst relevant government and other stakeholders. The section ends with a combined data table for all cities to allow city comparisons.

Spatial and administrative context:

The section describes the administrative geography of Lebanon within which urban and spatial governance operates and relates this to the ten selected cities.

Urban Space and population:

Focusing on the ten selected cities, geographical and administrative data is analyzed in terms of city sizes, built densities and recent growth. The city footprints are then linked to population figures disaggregated by main nationality group. This data provides a lens through which sectoral data offered in the subsequent report sections can then be analyzed.

Dimensions of sustainable urban development:

This section delves into main themes implicated in sustainable urban development, including

- Urban governance and municipal finance
- Economy and livelihoods
- Infrastructure and services (covering Housing and HLP so becomes Housing and HLP; Water, Wastewater, Solid waste, Electricity, Urban transport and mobility, Public space, Health, Education
- Safety and security
- Human rights and inclusion
- Heritage and culture
- Environment

For each theme, a national-level summary sets the stage for city-by-city comparative 'highlights'. Available data against relevant SDGs is identified across the sections. Interfaces with cross-cutting themes of human rights and inclusion groups are flagged throughout as they relate to the urban agenda. Each section ends with suggested 'ways forward'; these are intended as entry points for mitigating barriers to each sector's performance and to improving sector capacities to 'solve for the future'.

Conclusions and recommendations:

This section highlights key conclusions and recommendations from the space and population as well as sectoral analyses. It ends by proposing a set of overarching strategic action points aimed at creating an enabling environment for Lebanon's cities, through spatial and urban planning systems, to better contribute to sustainable development.

18 SDG 11: Make cities and human settlements inclusive, safe, resilient, and sustainable.

19 The UN Habitat Strategic Plan 2020-2023 reports its aim to 'advance sustainable urbanization as a driver of development and peace, to improve living conditions for all' (UN-Habitat, 2020:3).

Methodology



Photo of Beirut. ©Ahmad Chinder, 2021

Methodology

Synopsis

To characterize and analyze the state of the Lebanese cities in the absence of recent or reliable official data or of official urban/rural boundaries (see 'Data environment' box), a diverse range of data sources was gathered for each of ten selected cities. Earth observation data was used to define cities in terms of their continuously built up areas; expansion over the last three decades; and current density of built land cover. Population estimates stratified by the main nationality groups (Lebanese, Syrians, Palestinians in Lebanon (PRL), Palestinians from Syria (PRS)) available at cadastre level[20] were fitted to these city limits to estimate city populations. Secondary sectoral data was collated from a range of georeferenced sources and related as closely as its granularity allowed to the continuously built up areas. A desk-based literature review was conducted to identify sectoral SDG indicator scores, to include intersections with human rights; and to support overall interpretation of the data. Ten standalone city dashboards each comprising city-specific facts were produced as a form of mini-city profiles.

Key informants with expertise on the various themes and sectors were consulted on draft versions of report sections. Provisional findings were presented to Lebanese urban policy and research experts during an expert group meeting, and initial feedback secured. Ten city-specific consultation meetings were convened to which a total of 69 municipalities making up the cities were invited; these involved a presentation introducing the project, a validation of the draft city dashboard, and a semi-structured questionnaire aimed at identifying if municipalities in a given city collaborate on strategic urban issues and barriers to such collaboration. Sectoral and cross-cutting entry points and recommendations for moving towards sustainable urban development in Lebanon were then proposed for consideration. The draft report was sent for peer review to all key informants, expert group meeting invitees, municipalities, and selected UN agencies (see Annex 3 for report consultation and validation entities).

The remainder of this section offers further detail on methodological techniques as well as data sources and their limitations.

Data environment

Lebanon's data environment, particularly as relates to cities, is characterized by the following features:

- There are sensitivities around data generation and data transparency. Lebanon lacks recent official population data. The only national census was undertaken in 1932, with little political appetite for a new one in the context of a confessional governmental structure tied to the sectarian population distribution.[21] In the meantime, state and international entities rely on several partial data sources that variously piece together information on the main nationality cohorts present in the country.
- The lack of reliable population figures presents a constraint to immediate and long-range planning including for cities and their infrastructure and services.
- The lack of population census has meant there is no direct way to identify urban/rural land from a population density angle and thus no such spatial categories for data analysis. Alternative novel approaches to institutionalizing urban/rural land classification by the government are possible and are at the early stages in Lebanon.
- Socio-economic demographic data on certain Non-Lebanese nationals (Syrians, PRL, PRS) is on several measures more comprehensive and robust than that on Lebanese nationals. However, data on migrants other than these three Non-Lebanese groups has been minimal.
- There is weak coordination amongst government entities in terms of generating and sharing data.
- Lebanon's Central Administration for Statistics (CAS) has for years not been facilitated to fulfil its role, with a sense that national data generation efforts are being influenced by international donors and agencies rather than via the government's own national statistical agency. Efforts by the UN in Lebanon have been underway since 2016 to build the capacity of the national statistical system including and beyond the population question, through active engagement between CAS and the UN's Data and Statistics Working Group.
- Area-based data on specific cities relevant to sustainable development and to those SDGs measured at city level is extremely limited. Where it does exist, the geographic city units of analysis are inconsistently or unclearly derived.
- Whilst there is no dedicated urban monitoring system in place, significant experience in city-level urban observatory operations stands to be captured and potentially mainstreamed as part of a wider system of national data collection.

20 Cadastres in Lebanon are equivalent to Administrative Level 3 in terms of the UN Geospatial Information Section & Statistics Division's 'Second Administrative Level Boundaries' programme.

21 Further discussion can be found in Ekmekji (2012).

- Lebanon became the fourth country in the Arab region to adopt a Right of Access to Information Law in 2017, offering leverage to support a culture of accountability and participation. SDG 16 'Peace, justice and strong institutions' includes indicator 16:10:02 'Number of countries that adopt and implement constitutional, statutory and/or policy guarantees for public access to information'. Lebanon's 2012 law counts positively against the 'adoption' component of that indicator though the 'implementation' component has to date been characterized by serious enforcement challenges (Human Rights Watch, 2019).[22]

City selection

Cities selected were the largest in terms of land footprint area and assumed population, with the parallel aim of reaching a geographical spread across the country. Within the resource constraints of the project, an arbitrary count of ten cities was selected. Cities with an administrative 'capital' role at governorate or district level[23] were prioritized, on the broad assumption that such a role may be associated with willingness to engage with the current report's data collection, validation and follow-up actions.

The resulting selection includes the capitals of all eight governorates with the two exceptions of Baabda which is subsumed within the continuously built up area conception of Beirut adopted in the current report, and of Halba in Akkar Governorate (Table 1). Also included are five additional cities selected from among the capitals of the 26 districts (Table 2). The resulting selection emerged as covering 41% of the population living in Lebanon based on population calculations subsequently undertaken.



Photo in Tripoli. ©UN-Habitat, 2021

Governorate	*Governorate capital*
North	Tripoli
Beirut	Beirut
Mount Lebanon	Baabda
Baalbek-Hermel	Baalbek
Bekaa	Zahleh
South	Saida
Nabatiyeh	Nabatiyeh

Table 1 Cities selected for analysis in current report, relative to all governorate capitals. *Source:* IFPO/CNRS (2007).

Governorate	*District*	*District capital*
Akkar	Akkar	Halba
North	Tripoli	Tripoli
	Koura	Amioun
	Zgharta	Zgharta
	Batroun	Batroun
	Bcharreh	Bcharreh
	Minieh-Denniyeh	Minieh-Denniyeh
Beirut	Beirut	Beirut
Mount Lebanon	Baabda	Baabda
	Metn	Jdeideh
	Chouf	Deir El-Qamar
	Aley	Aley
	Keserwan	Jounieh
	Byblos	Byblos
Bekaa	Zahleh	Zahleh
	Bekaa	Joub Jannine
	Gharbi	-
	Rachaiya	Rachaiya
Baalbek-Hermel	Baalbek	Baalbek
	Hermel	Hermel
South	Saida	Saida
	Tyre	Tyre
	Jezzine	Jezzine
Nabatiyeh	Nabatiyeh	Nabatiyeh
	Bint Jbayl	Bint Jbayl
	Marjaayoun	Marjaayoun
	Hasbaiya	Hasbaiya

Table 2 Cities selected for analysis in current report, relative to all district capitals. *Source:* IFPO/CNRS (2007).

City boundary-drawing

Rationale recap

Geographical boundaries appropriate to purpose are the basis of spatial analysis. Akin to ecological area

22 SDG 16 promotes 'Peace, justice and strong institutions'

23 See 'Administrative context' report section for governmental administrative divisions.

boundaries or river basin boundaries for instance, urban boundaries define the city as the unit of study, laying the frame for area-based urban analysis, coordination and programming whilst also facilitating inter-city comparison and learning. In Lebanon, the boundaries of cities are not officially demarcated. To support information and urban management in the immediate and longer terms, a consistent approach to creating boundaries is needed. The current document suggests city boundaries for the ten main cities as an analytical construct derived in a methodologically neutral way that permits even-handed comparisons between cities in Lebanon along several dimensions relevant to sustainable development. This exercise is undertaken in acknowledgement that official boundary delimitation in the national administrative context is the preserve of the Government of Lebanon. The term 'city' is used without attempt to demarcate cities from towns. The approach is not intended to underplay the interconnectedness of cities as parts of complex systems spanning the urban-rural continuum.

Technique

Satellite imagery from the European Commission's Global Human Settlement Layer (GHSL) (EC, 2018) was used to determine the boundary of the continuously built up area of each city. Google Earth (2021) imagery was used to refine the boundaries to update them to 2021. In practice, the refinements were negligible.[24]

GHSL satellite imagery from 1990 was then used to delimit historical city boundaries. Change in city area over the three decades from 1990 was identified, to add to understanding of the two-dimensional morphology of Lebanon's urbanization and rough likely trajectories by city.

GHSL satellite imagery from 2018 was also used to estimate the proportion of land within the boundaries of each city that comprises built-up land cover. Built density provides signposts towards the intensity of use of an urban area or its 'compactness', the extent of open space and – notwithstanding the imperative to preserve urban open space – a sense of the in-principal potential for infill development as one alternative to peripheral sprawl. Built up land cover analyzed in this report is a parameter derived from a wider ROAS-led regional remotely sensed data platform being piloted on Lebanon amongst other countries in the region (UN-Habitat Regional Office of Arab States, forthcoming).

Data sources

This section details the main data sources used to analyze urban Lebanon and the ten selected cities, with their attendant caveats.

Primary data

- New urban boundaries were generated as a form of GIS primary data, using GHSL (EC, 1990; 2018) and Google Earth (2021).
- Key informants with expertise in selected sectors/themes were interviewed in the second and third quarters of 2021 (See Annex 3 Report consultation and validation entities).
- Questionnaire-based group discussions targeting the 69 municipalities making up the ten selected cities were undertaken in August to September 2021. One two-hour group discusssion for each city was convened, with all municipalities in each city invited and responses secured in real time, aimed at achieving city-wide consensus responses rather than sets of individual municipality responses. Municipalities were asked to collectively arrive at responses on behalf of their respective city. The questionnaire sought to determine the broad state of inter-municipal collaboration practices and barriers in a given city. The premise was that municipalities' collaboration within their city boundary is necessary for local strategic coordination on urban sustainable development. It also sought to identify main barriers to city municipalities' capacities to implement their city's vision. This was to help inform the design of any future capacity-building assistance interventions. Municipalities were given the opportunity to verify and validate the findings in draft, with amendments integrated.

?

City municipalities group discussion on inter-municipality collaboration?

Questions were:

- ○ In what sector(s) do municipalities in your city already work together collaboratively?
- ○ What are the main capacity-related barriers faced that limit your city's ability to achieve its future vision?

Caveats

- City consultation meetings for administering the questionnaire survey of municipalities achieved a limited municipality attendance rate. One city was unable to attend entirely. One city, Hermel, is contained entirely within the Municipality of Hermel. Hermel's responses to the questionnaire are to be construed as referring to inter-municipal engagement at the municipality boundary rather than inter-municipal engagement within the continuously built

24 Possibly due to the limited construction activity since the onset of the economic crisis from 2019.

up city. Overall, the municipality consultation findings are perceptions-based; further detailed research would be required to underpin direct programming.

Original manipulations of secondary data

- Use of original urban boundaries to analyze built-up land cover area data GHSL (EC, 2018) for the ten cities to identify city built density.
- Use of municipality-level survey data from the Inter-Ministerial and Municipal Platform for Assessment, Coordination and Tracking (IMPACT) Open Data e-governance platform (Lebanon Central Inspection and Ministry of Displaced, 2021), where municipality responses were grouped geographically to correspond to the continuously built up cities as defined in this report. Self-reported responses from municipalities included in the current report span the following: existence of industrial areas, existence of potable water sources, state of the water network, solid waste collection handling entity, existence of waste sorting/recycling, existence of alternative energy, road conditions, means of public transport, presence of bus stops, presence and state of public spaces, potential sites for public spaces, state of lighting network, existence of recent initiatives to improve health sector, number of COVID cases reported by the Ministry of Public Health (MoPH) and reviewed by local authority, share of 4-16 year olds out of school, existence of tourist attractions that stand to be developed; existence of recent initiatives to improve health sector.

Caveats

- The data years of the satellite imagery for urban boundary and built land cover are different (2021 and 2018 respectively) which introduces error in the calculation of built density per city.
- IMPACT datasets secured responses from 1,150 out of the country's total 1,287 municipalities and localities[25] (of which there are 1,054[26] and 233 respectively), constituting an 89% response rate.
- National analyses of the IMPACT data must be interpreted in light of the 89% national response rate. Further, the number of responding municipalities for any given question varies widely[27].
- The total number of respondents nationally (1,150) is used as the denominator for national analysis of the IMPACT data, acknowledging that this comprises municipalities as well as a small minority of non-municipal localities. Respondents for the ten selected cities, however, are all municipalities (Table 3).
- IMPACT considers that there are 1,054 municipalities in the country which is marginally higher than the UN's unofficial derivation of 1,047 (IACL, 2021). The latter source is retained for use in city dashboards to maintain consistency of data frameworks with the population data used herein.
- Table 1 shows municipalities included in the current report which do not feature in the IMPACT database, by continuously built up city. Notably, Beirut Municipality - one of the 31 municipalities making up the city of Beirut – is not present in the survey.
- The identity of the respondent(s) and respective levels of technical competence in responding across a wide range of technically demanding questions on behalf of the municipality is not known.[28]
- It is not always possible to distinguish between 'question answered in negative' and 'question not answered'. For this reason, positive responses are likely to be more reliable than negative ones. This means that scores may be considered minimum and not maximum values.

City	*No. of municipalities in city*	*City municipalities in 'IMPACT' survey*	
		No. included	*Not responding*
Tripoli	4	4	-
Beirut	31	30	Beirut
Jounieh	3	3	-
Byblos	5	2	Bmehrayn
			Mastita
			Qartaboun
Baalbek	3	3	-
Hermel	1	1	-
Zahleh	2	1	Ksara
Saida	9	9	-
Tyre	4	2	Ain Baal
	4	3	Borj El-Chmali
Nabatiyeh	6	3	Mazraat Kfarjaouz
			Nabatiyeh El-Faouqa
			Nabatiyeh El-Tahta

Table 3 Municipalities in the ten cities analyzed in the current report which are not respondents to a survey of municipalities published on the governmental e-governance platform, IMPACT. *Source*: Lebanon Central Inspection & Ministry of Displaced (2021).

25 Areas with no municipality.

26 Personal communication with IMPACT focal point via MOIM, 28 December 2021.

27 Whilst the number of respondents per question has been stated in the analysis case by case, the reason for non-responses against some questions may not be random and may be self-selecting for a reason that is consequential for the analysis.

28 It is however understood that an extensive training outreach to municipalities/unions of municipalities was undertaken by IMPACT to support the data quality.

Secondary data

A wide range of secondary literature was drawn on, both qualitative (see Bibliography) and quantified (listed below non-exhaustively):

- For population, the current report uses a national dataset (IACL, 2020) agreed between the Government of Lebanon and UN for response planning purposes in the context of the Lebanon Crisis Response Plan (GoL and UN, 2021). It has the advantages of conditional government acceptance and of being available at cadastre level,[29] permitting aggregation of the cadastres making up each city to arrive at a working population figure stratified by nationality for each city. Nationalities covered are Lebanese, Syrian, PRL, PRS, though it is known that other nationalities are present (IOM, 2021).[30] Cadastre population figures are fitted to the boundary of each continuously built up city. Where a cadastre is divided by the city boundary, a case-by-case visual assessment of satellite imagery showing the cadastre's built up land distribution relative to the position of the dividing boundary is undertaken. The proportion of the cadastre's population that is within the city is estimated accordingly.
- SDG indicator data from that compiled in the ESCWA Data Portal (ESCWA, 2021a) and Lebanon SDG Monitor (ESCWA, 2021b).
- Various multi-sectoral data from the 'Labour Force and Household Living Conditions Survey 2018-2019' (CAS and ILO, 2019).
- Residential shelter rents among Syrians gathered as part of the Vulnerability Assessment of Syrian Refugees in Lebanon (UNICEF, WFP and UNHCR, 2021).
- Residential sales prices in selected submarkets across Lebanon, gathered in 2019 by the Real Estate Syndicate Lebanon (REAL, 2019).
- Data on community tensions surrounding competition for service and utilities from the 'Perceptions survey of social tensions throughout Lebanon' (ARK and UNDP, 2021).
- The number of 'most vulnerable cadastres' across Lebanon (of which 251 were identified nationally in 2015 were counted where they fall within the selected cities as indicators of poverty (IACL, 2015).
- The number of 'most disadvantaged areas' across Lebanon (of which 498 were identified nationally in 2017 were counted where they fall within the selected cities as indicators of poverty (UN-Habitat and UNICEF, 2020).
- Related to the previous point, 29 of these disadvantaged areas underwent multisectoral neighbourhood profiling (UN-Habitat & UNICEF, 2017-2021). Profiled neighbourhoods falling within the boundaries of the ten selected cities are shown in Table 4. Six of the 10 cities contain profiled neighbourhoods. Neighbourhood indicators are analyzed in the report.

City	*Profiled neighbourhoods within city*
Tripoli	Tabbaneh
	Jabal Mosen
	El-Qobbeh
	Haddadine
Beirut	Daouk-Ghawash
	Hayy Tamlis
	Sabra
	Karm El-Zeytoun
	Maraash
	Hayy El-Jadid
	Nabaa
Jounieh	-
Byblos	-
Baalbek	Shoaab
	Mogher El-Taheen
	El-Soleh Sahet El-Naser
Hermel	-
Zahleh	Haoush El-Oumara
Saida	Old Saida
Tyre	Maachouk
Nabatiyeh	-

Table 4 Neighbourhoods profiled with the ten selected cities. *Source:* UN-Habitat & UNICEF (2017-2021).

Data source limitations

- The LCRP population package (IACL, 2020) does not factor in Non-Lebanese nationals known to be present beyond PRL, PRS and Syrians.
- Several datasets are not available at cadastre or municipal level and thus cannot be readily mapped onto the continuously built up city; in some instances district or even governorate level indicators are used.
- The reference year for the various data sets is not aligned, introducing limitations on their comparability.

29 Administrative Level 3

30 A 'migrant presence monitoring' baseline assessment identified 207,696 migrants nationally (IOM, 2021).

- Neighbourhood profile data coverage is spatially limited, typically spanning neighbourhoods under 1km^2. Profiled neighbourhoods are selected for concentration of disadvantage rather than as representative of their wider cites. These limitations do not outweigh the value of their use for the current purpose; urban averages are typically blind to such small pockets of vulnerability which are important to a 'leave no one behind' agenda.[31]

Consultation and validation stages

The following steps were taken to generate and validate the current report.

- Key informant interviews on selected sectoral chapters (June to August 2021)
- Expert group meeting of research & policy community individuals (August 2021)
- Ten city consultation and group discussion meetings, with all municipalities of each city invited to the respective meeting. Invitations were extended to both the elected mayor and an urban-related technical officer of each municipality. Provisional city dashboards were consulted upon and the city municipality questionnaire (see section Data sources / Primary data above) was administered in real time (August to September 2021)
- Peer review of draft report targeting key informants, expert group meeting invitees, 69 municipalities in the 10 cities, UN agencies, Government of Lebanon entities, and other research experts (November to December 2021)

See Annex 3 for comprehensive list of consultation and validation individuals and entities.

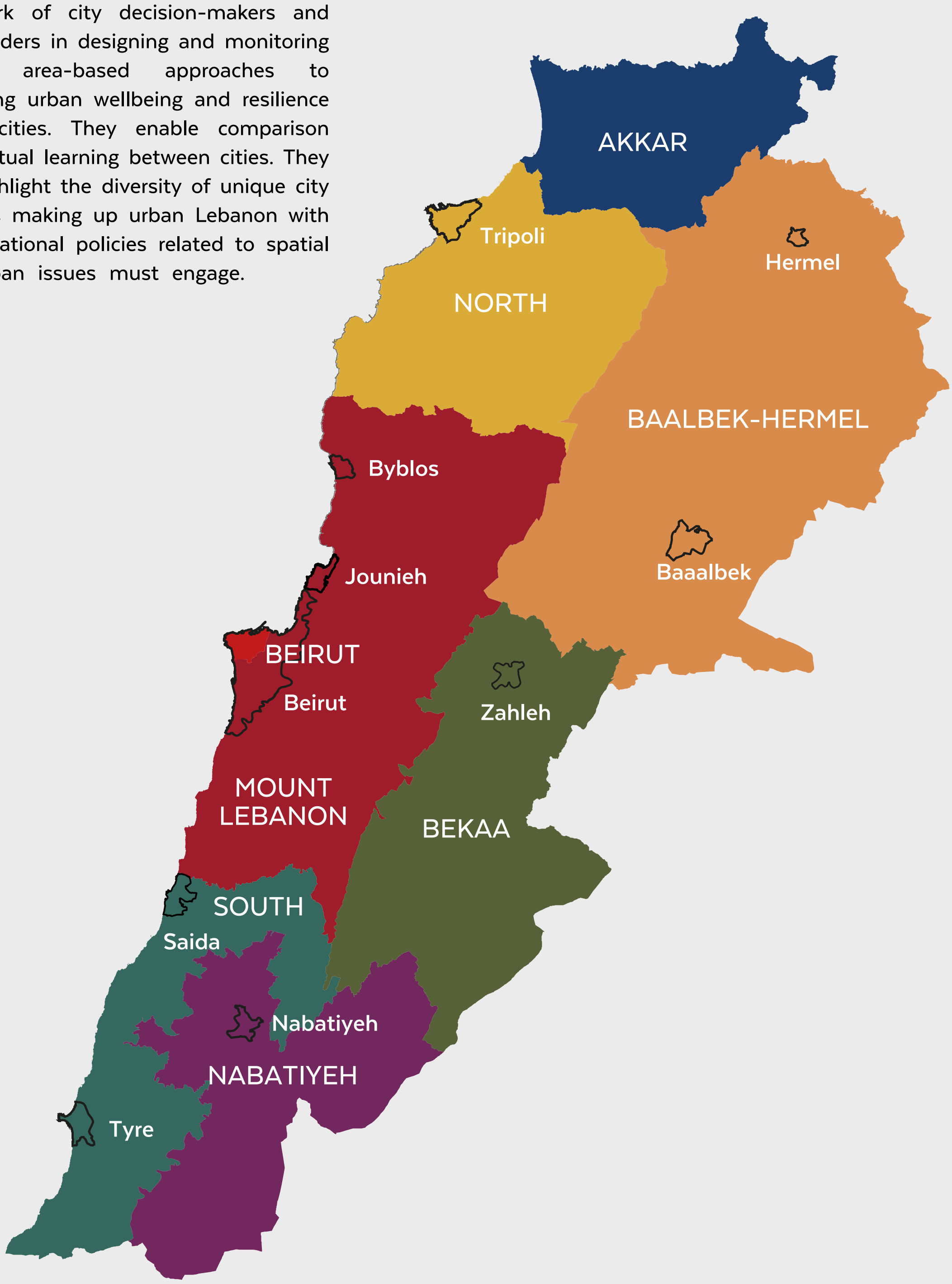


Photo in Beirut. ©Synne Bergby, 2017

31 UN-Habitat elsewhere has stated that "One of the contributing obstacles to effective urban poverty reduction is the fact that, in many cities, authorities do not acknowledge many of their poorest districts. As a result, slums, informal settlements and peri-urban communities located outside the official municipal boundaries are frequently excluded from censuses, household surveys and other records. This perpetuates their vulnerability by rendering it invisible. Data collection must therefore ensure that the most marginalized groups and locations are represented. To achieve this, however, often requires the use of more responsive and localized methods in informal settlements".

City Dashboards

City dashboards present city-specific multisectoral data relevant to sustainable urban development. They aim to support the work of city decision-makers and stakeholders in designing and monitoring holistic area-based approaches to improving urban wellbeing and resilience within cities. They enable comparison and mutual learning between cities. They also highlight the diversity of unique city contexts making up urban Lebanon with which national policies related to spatial and urban issues must engage.

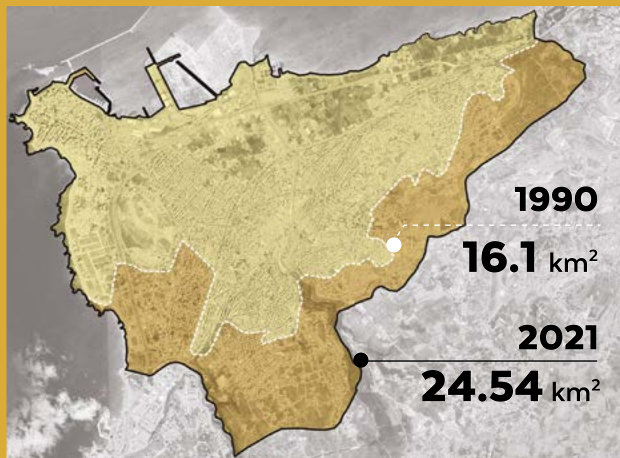


TRIPOLI CITY

City dashboards present city-specific multisectoral data relevant to sustainable urban development. They aim to support city decision-makers and stakeholders in designing and monitoring holistic area-based approaches to improving urban wellbeing and resilience within cities. They enable comparison and mutual learning between cities, and highlight the diversity of unique city contexts that make up urban Lebanon.

City boundaries are defined on a working basis according to their continuously built up areas. City population figures are aggregated up from the cadaster-level population dataset agreed between the Government of Lebanon and UN for planning purposes in the Lebanon Crisis Response Plan.

CITY AREA & EXPANSION



CITY AREA CHANGE

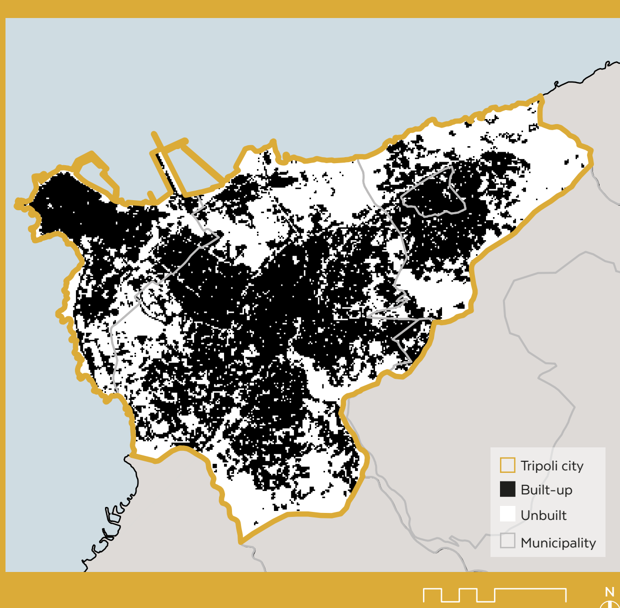
8.5 km² - **52.6%**

Source: UN-Habitat Lebanon, 2021.

LAND COVER WITHIN CITY PERIMETER 2018

BUILT-UP **12.86** km² (52.4%)

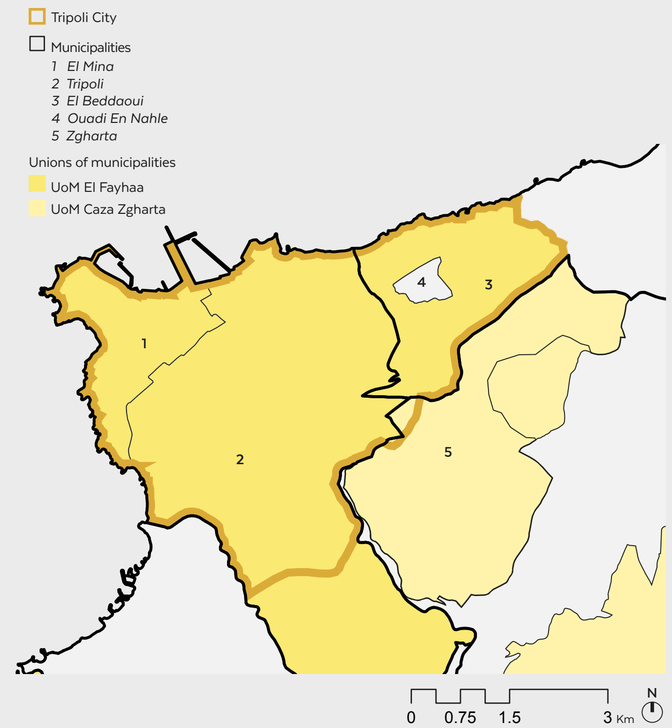
UNBUILT **11.7** km² (47.6%)



Source: Global Human Settlements Layer Dataset: Global built-up grid 2018. City boundaries 2021: for reference year 2018 cross-referenced and updated to 2021 using Google Earth imagery 2021, viewed 2021.

ADMINISTRATIVE CONTEXT

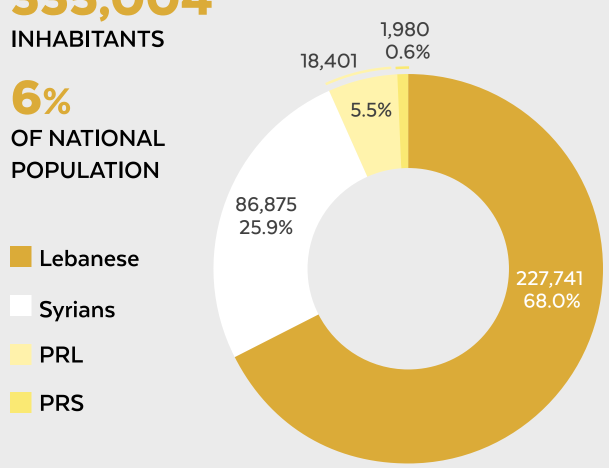
Governorate: North | **District**: Miniyeh-Danniyeh, Tripoli, Zgharta



POPULATION

335,004
INHABITANTS

6%
OF NATIONAL POPULATION



POPULATION DENSITY

13,653 Persons per km² of city area (built-up & unbuilt land)

26,048 Persons per km² of city area (built-up land only)

Sources (in order): Population Package (Inter-Agency Coordination Lebanon (2020) in Lebanon Crisis Response Plan (Government of Lebanon & UN, 2021)). City boundaries (UN-Habitat, 2021).

GOVERNING SUSTAINABLE URBAN DEVELOPMENT

Multi-municipality sustainable development strategy in place:
Al Fayhaa 2020 Sustainable Development Strategy 2020 (published 2011; 2014)
Danniye UoM: Two separate Strategic Plans (2012, 2013)

YES ✓ **Multi-sectoral city profile related to sustainable urban development exists**

4 El-Qobbeh, Tabbaneh, Jabal Mohsen, Haddadine — **Multi-sectoral neighbourhood profiles related to sustainable urban development exist**

1 **Municipal elected mayors who are female**

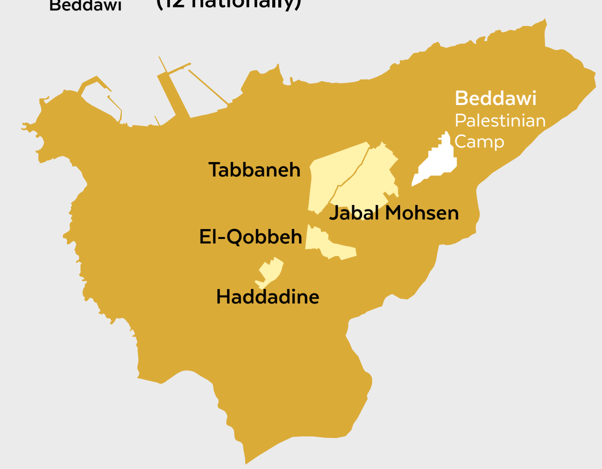
Sources (in order): UN-Habitat, 2016, 2017; UN-Habitat and UNICEF 2017-2020; Ministry of Interior and Municipalities website, viewed Sep 2021.

POVERTY

12 out of 18 — **City cadastres among the 251 most vulnerable in Lebanon**

6 areas — **City cadastres identified as - or containing one or more areas identified as - among the 498 most disadvantaged areas in Lebanon**

1 Beddawi — **UNRWA-managed Palestinian Camps** (12 nationally)



Disadvantaged neighbourhoods profiled by UN-Habitat and UNICEF 2017-2020. The indicator ranges represent the highest and lowest scores for neighbourhoods profiled in the city. Read profiles at lebanonportal.unhabitat.org.

31.7%	48.6%	25%
[Tripoli District]	[Minieh-Danniyeh District]	[Zgharta District]

«Poor or very poor» in self-classification of wealth status survey

Sources (in order): Inter-agency Coordination Lebanon, 2015; UN-Habitat & UNICEF, 2018; UNRWA website, viewed 2021; Labour Force and Household Living Conditions Survey (CAS & ILO, 2019).

ECONOMY & LIVELIHOODS

Labour force unemployment rate

11.6%	14.1%	17.8%
[Tripoli District]	[Zgharta District]	[Minniey-Dannyeh District]

Labour force participation rate - Women / Men

24.9%/74.2%	26.8%/68.1%	22.2%/74.8%
[Tripoli District]	[Zgharta District]	[Minniey-Dannyeh District]

Sources (in order): Lebanon Central Inspection & Ministry of Displaced (2021) Rural Development Survey of municipalities, in IMPACT Open Data website; Labour Force and Household Living Conditions Survey 2018-2019 (CAS & ILO, 2019).

HOUSING

Monthly rent for residential dwelling (Syrian) 2021 — LBP **409,930** [Tripoli District]; LBP **389,370** [Zgharta District]

Ownership of primary residence by one of household members [governorate level] — **72%** North

Average residential sales value per sq m (units <=5 years old) 2019 [boundaries of place names not specified] — No data

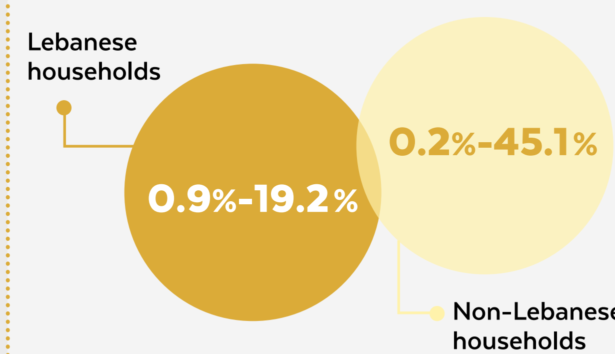
Sources (in order): Vulnerability Assessment of Syrian Refugees 2021 (reference date Jun-Jul 2021) (Inter-Agency Coordination Lebanon et al, 2021); Labour Force and Household Living Conditions Survey 2018-2019 (CAS & ILO, 2019) REAL Price Index Survey (Real Estate Syndicate of Lebanon, 2019).

IN PROFILED DISADVANTAGED NEIGHBOURHOODS

14.3% - 50.8%

'Buildings in need of major structural repair/emergency intervention (%)' based on neighbourhood profile(s) of most disadvantaged areas

PROPORTION OF OVERCROWDING



WATER

North WE	**Regional Water Establishment** (RWE)
58%	**Water bill collection rate by regional water establishment** (RWE)
68%	**Drinking water supply network connection rate by regional water establishment**
76.7% [North Governorate]	**Distribution of primary residences** according to availability of services or means & governorates: public water (2018)

Sources (in order): UN-Habitat, 2015; Fanack after MEW, 2010, updated based on personal communication with MEW, 2015; Labour Force and Household Living Conditions Survey (CAS & ILO, 2019).

IN PROFILED DISADVANTAGED NEIGHBOURHOODS

94.4%-97.1%	**Use of improved drinking water sources** (by number of residents)
0.0%-6.3%	**Streets (by area) with no domestic water supply**
2.9%-26.1%	**Buildings not connected to the domestic water network**

WASTEWATER

80.7% [North Governorate]	**Primary residences according to type of sanitation means: Public sewage system**
17% [North Governorate]	**Primary residences according to type of sanitation means (septic tank)**

Source: Labour Force and Household Living Conditions Survey 2018-2019 (CAS & ILO, 2019).

IN PROFILED DISADVANTAGED NEIGHBOURHOODS

78.1%-93.3%	**Use of improved sanitation (by number of residents)**
17.1%-51.4%	**Streets (by area) with malfunctional wastewater network**
9.2%-12.7%	**Buildings with blocked or no connection to the wastewater network**

SOLID WASTE

NO ✕	**Public sector-led solid waste secondary sorting operational**
3	**Municipalities self-reporting existence of waste sorting and recycling**

Sources (in order): UN-Habitat (2021) Desk review; Lebanon Central Inspection & Ministry of Displaced (2021).

ELECTRICITY

99.7% [North Governorate]	**Percentage distribution of primary residences according to availability of services: Electricity**
YES ✓	**Existence of alternative energy as reported by local authorities, by type**

Sources (in order): Labour Force and Household Living Conditions Survey (CAS & ILO, 2019); Central Inspection Initiative IMPACT Open Data website: Rural development survey of municipalities in Lebanon (Sep 2021).

IN PROFILED DISADVANTAGED NEIGHBOURHOODS

12.7%-56.9%	**Buildings connected with critical defects to the public electrical grid**
3.1%-5.1%	**Streets (by street area) with no street lighting**

HEALTH

COVID
- 2.1% of national population
- 6.0% of COVID cases nationally

HEALTH CARE CENTRES
- 47 Primary
- 11 Secondary

Sources (in order): Central Inspection Initiative IMPACT Open Data website: Rural development survey of municipalities in Lebanon (data gathered Sep 2020; publication Sep 2021); UN-Habitat & UNICEF Neighbourhood Profiles Geoportal, viewed 2021.

IN PROFILED DISADVANTAGED NEIGHBOURHOODS

34.8% - 55.7%
Care seeking for diarrhoea

CHRONICALLY ILL
- of Lebanese: 11.1%-15.1%
- of Non-Lebanese: 8.1%-16.7%

HEALTH INSURANCE COVERAGE
- of Lebanese households: 15.7%-27.5%
- of Non-Lebanese households: 3.9%-9.1%

EDUCATION

SCHOOLS
- 107 Public schools
- 10 UNRWA schools

2% - 20%
School dropouts among Lebanese children within the municipality, i.e. % youth 4-16 years old outside school system, as reported by the local authority. Range of percents among municipalities comprising each city.

Sources (in order): Central Inspection Initiative IMPACT Open Data website: Rural development survey of municipalities in Lebanon (Sep 2021) as reported by MoPH and reviewed by local authority.

IN PROFILED DISADVANTAGED NEIGHBOURHOODS

56.3%-90.1%	**Primary school attendance among children (6-11)**
40.2%-74.1%	**Secondary school attendance among children (12-17)**

URBAN MOBILITY

30.9%	**Proportion of the population that has convenient access to public transport**

Source: UN-Habitat Urban Indicators Database (2020).

PUBLIC SPACE

47.6%	**Unbuilt land cover within city perimeter 2021**
34.9 m² per person	**Unbuilt land cover per person 2021**
72.8%	**Population within 400m walking distance to an open public space**

Sources (in order): Unbuilt area: Global built-up grid for reference year 2018 (10m resolution). GHS stands for Global Human Settlements; S2 refers to the Sentinel2- satellite. Population: Population Package (Inter-Agency Coordination Lebanon (2020) in Lebanon Crisis Response Plan (Government of Lebanon & UN, 2021)). City boundaries (UN-Habitat, 2021); City boundaries 2021: for reference year 2018 cross-referenced and updated to 2021 using Google Earth imagery 2021, viewed 2021.

IN PROFILED DISADVANTAGED NEIGHBOURHOODS

2.3%-20.9%	**Neighbourhood area comprising open spaces**
21%-23%	**Open spaces (by area) that are publicly used**
77%-78%	**Open spaces (by area) that are privately used**

PROTECTION

IN PROFILED DISADVANTAGED NEIGHBOURHOODS

6.1%-13.8%	**Lebanese children (5-17) involved in economic activities**
6.4%-18.9%	**Non-Lebanese children (5-17) involved in economic activities**
5.1%-18.4%	**Young women aged 15-19 who are currently married**
48%-73.3%	**Lebanese children (5-17) involved in economic activities who are exposed to any hazardous work condition**
65.3%-76.5%	**Non-Lebanese children (5-17) involved in economic activities who are exposed to any hazardous work condition**

SAFETY & SECURITY

6.1% [North Governorate]	**Source of tensions: Competition for services and utilities**

Source: Regular Perceptions Survey of Social Tensions Throughout Lebanon, Wave XI (UNDP & ARK, August 2021).

IN PROFILED DISADVANTAGED NEIGHBOURHOODS

1.1%-13.8%	**Of Lebanese households that have faced disputes in the area**
2.2%-6.4%	**Of non-Lebanese households that have faced disputes in the area**

CULTURAL HERITAGE

YES ✓	**CHUD-designated city**
UNESCO designation	**UNESCO tentative list (2019)**
El Mina, Majdalaya, Zgharta,	**Municipalities in city self-reporting existence of initiatives and projects in past five years to improve tourism sector**

Sources (in order): Desk review (UN-Habitat, 2021); UNESCO website, viewed Aug 2021; Lebanon Central Inspection & Ministry of Displaced (2021) Rural Development Survey, in Impact Open Data website.

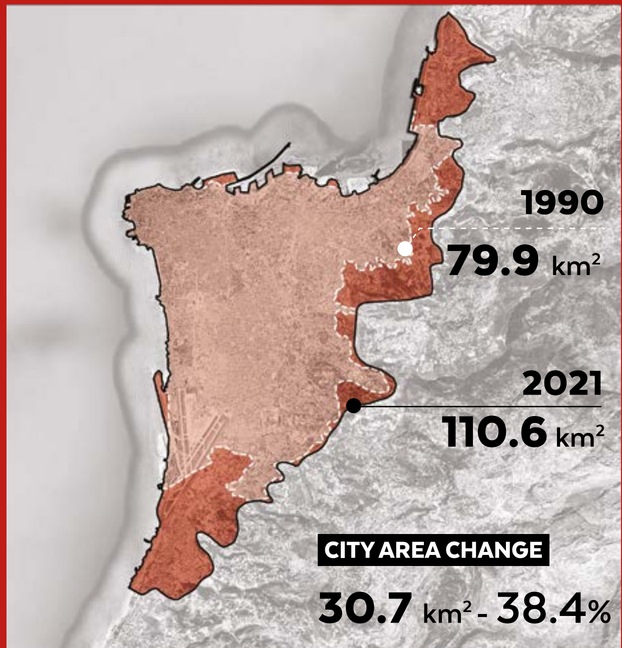
For a summary of all data compared across the ten selected cities, see UN-Habitat & ESCWA (2021) The State of Lebanese Cities Report 2021.

BEIRUT CITY

City dashboards present city-specific multisectoral data relevant to sustainable urban development. They aim to support city decision-makers and stakeholders in designing and monitoring holistic area-based approaches to improving urban wellbeing and resilience within cities. They enable comparison and mutual learning between cities, and highlight the diversity of unique city contexts that make up urban Lebanon.

City boundaries are defined on a working basis according to their continuously built up areas. City population figures are aggregated up from the cadaster-level population dataset agreed between the Government of Lebanon and UN for planning purposes in the Lebanon Crisis Response Plan.

CITY AREA & EXPANSION

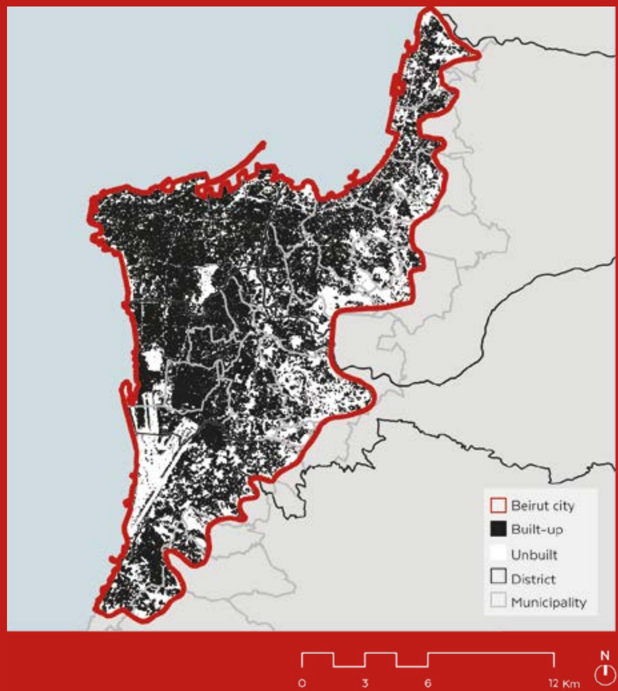


Source: UN-Habitat Lebanon, 2021.

LAND COVER WITHIN CITY PERIMETER 2018

BUILT-UP **64.6** km² (58.4%)

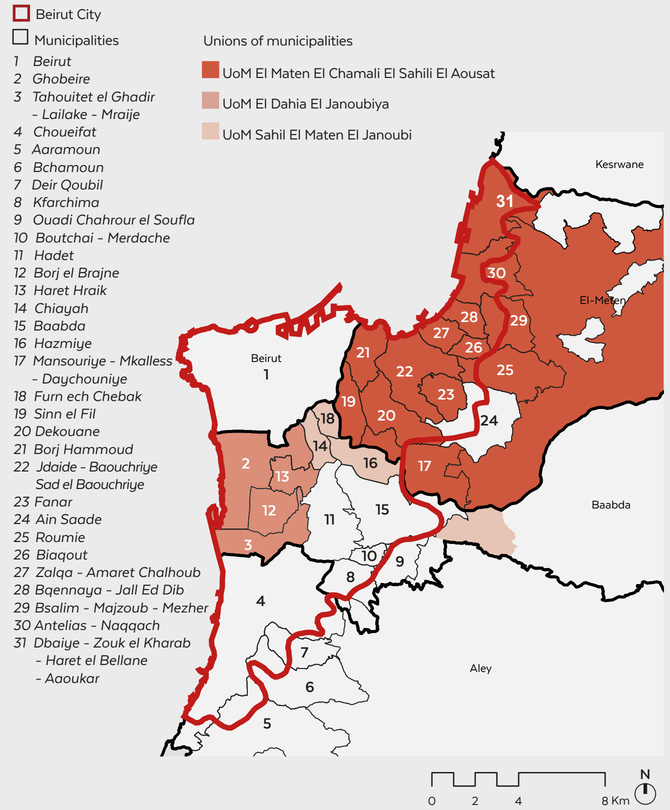
UNBUILT **46.0** km² (41.6%)



Source: Global Human Settlements Layer Dataset: Global built-up grid 2018. City boundaries 2021: for reference year 2018 cross-referenced and updated to 2021 using Google Earth imagery 2021, viewed 2021.

ADMINISTRATIVE CONTEXT

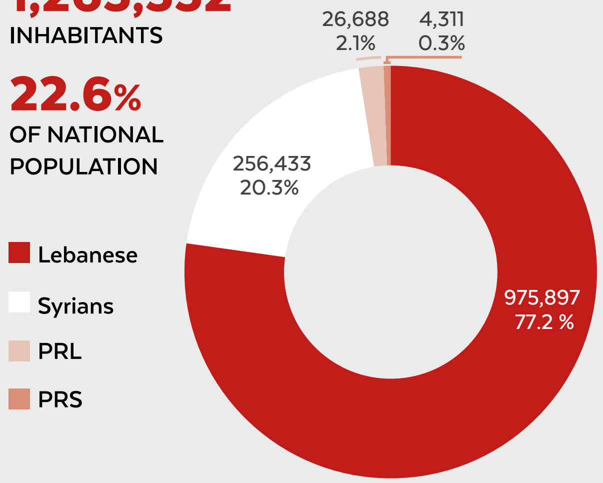
Governorate: Beirut, Mount Lebanon | **District:** Beirut, Aley, Baabda, Metn



POPULATION

1,263,332
INHABITANTS

22.6%
OF NATIONAL POPULATION



POPULATION DENSITY

11,423	**Persons per km² of city area (built-up & unbuilt land)**
19,568	**Persons per km² of city area (built-up land only)**

Sources (in order): Population Package (Inter-Agency Coordination Lebanon (2020) in Lebanon Crisis Response Plan (Government of Lebanon & UN, 2021)). City boundaries (UN-Habitat, 2021).

GOVERNING SUSTAINABLE URBAN DEVELOPMENT

Multi-municipality sustainable development strategy in place:
No

YES ✓ — **Multi-sectoral city profile related to sustainable urban development exists**

8 — Daouk-Ghawash, Hayy Tamlis, Sabra, Karm El-Zeytoun, Maraash, Hayy El-Jadid, Nabaa; Hamra — **Multi-sectoral neighbourhood profiles related to sustainable urban development exist**

0 — **Municipal elected mayors who are female**

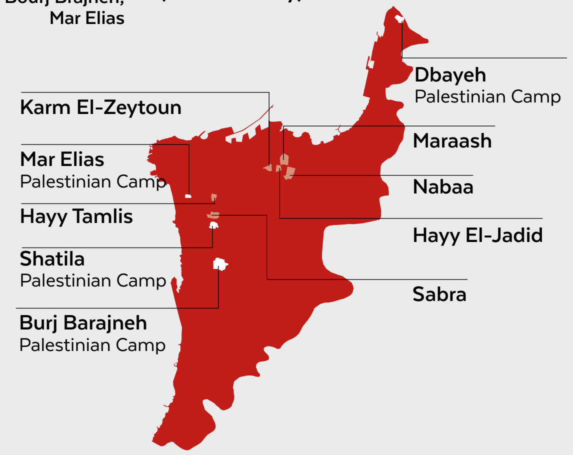
Sources (in order): UN-Habitat, 2021; UN-Habitat and UNICEF 2017-2020; Ministry of Interior and Municipalities website, viewed Sep 2021.

POVERTY

23 out of 55 — **City cadastres among the 251 most vulnerable in Lebanon**

19 areas — **City cadastres identified as - or containing one or more areas identified as - among the 498 most disadvantaged areas in Lebanon**

4 — Dbayeh; Shatileh; Bourj Brajneh; Mar Elias — **UNRWA-managed Palestinian Camps** (12 nationally)



Disadvantaged neighbourhoods profiled by UN-Habitat and UNICEF 2017-2020. The indicator ranges represent the highest and lowest scores for neighbourhoods profiled in the city. Read profiles at lebanonportal.unhabitat.org.

25.5% [Beirut District]	**26.8%** [Baabda District]	**"Poor or very poor" in self-classification of wealth status survey**
20.4% [Metn District]	**29.4%** [Aley District]	

Sources (in order): Inter-agency Coordination Lebanon, 2015; UN-Habitat & UNICEF, 2018; UNRWA website, viewed 2021; Labour Force and Household Living Conditions Survey (CAS & ILO, 2019).

ECONOMY & LIVELIHOODS

Labour force unemployment rate

11.6% [Beirut District]	**11.6%** [Baabda District]
7.1% [Metn District]	**13%** [Aley District]

Labour force participation rate - Women / Men

36.8%/71.4% [Beirut District]	**32.3%/73.8%** [Baabda District]
41.6%/70.9% [Metn District]	**27.6%/77.5%** [Aley District]

Sources (in order): Lebanon Central Inspection & Ministry of Displaced (2021) Rural Development Survey of municipalities, in IMPACT Open Data website; Labour Force and Household Living Conditions Survey 2018-2019 (CAS & ILO, 2019).

HOUSING

Monthly rent for residential dwelling (Syrian) 2021 [district level]

	LBP
Beirut	546,604
Baabda	371,277
Metn	487,804
Aley	415,620

Average residential sales value per sq m (units <=5 years old) 2019 [boundaries of place names not specified]

	USD
Beirut	3,136
Ras Beirut	3,443
Downtown	4,932
Achrafieh	2,912
Beirut Other Areas	2,544
Baabda	1,687

Ownership of primary residence by one of household members [governorate level]

Beirut	48.8%
Mount Lebanon	64.1%

Sources (in order): Vulnerability Assessment of Syrian Refugees 2021 (reference date Jun-Jul 2021) (Inter-Agency Coordination Lebanon et al, 2021); Labour Force and Household Living Conditions Survey 2018-2019 (CAS & ILO, 2019) REAL Price Index Survey (Real Estate Syndicate of Lebanon, 2019).

IN PROFILED DISADVANTAGED NEIGHBOURHOODS

17.3% - 52.8%

'Buildings in need of major structural repair/emergency intervention (%)' based on neighbourhood profile(s) of most disadvantaged areas

PROPORTION OF OVERCROWDING

Lebanese households: **0.7% - 26.3%**

Non-Lebanese households: **22.5% - 53.3%**

WATER

Beirut & Mount Lebanon WE — **Regional Water Establishment** (RWE)

62% — **Water bill collection rate by regional water establishment** (RWE)

85% — **Drinking water supply network connection rate by regional water establishment**

90.7% [Beirut governorate]
84.6% [Mount Lebanon]
Distribution of primary residences according to availability of services or means & governorates: public water (2018)

Sources (in order): UN-Habitat, 2015; Fanack after MEW, 2010, updated based on personal communication with MEW, 2015; Labour Force and Household Living Conditions Survey (CAS & ILO, 2019).

IN PROFILED DISADVANTAGED NEIGHBOURHOODS

80.6%-99.2% — **Use of improved drinking water sources** (by number of residents)

0%-19.5% — **Streets (by area) with no domestic water supply**

2.8%-17.9% — **Buildings not connected to the domestic water network**

WASTEWATER

100% [Beirut governorate] | **78.3%** [Mount Lebanon] — **Primary residences according to type of sanitation means: Public sewage system**

0% [Beirut governorate] | **21.3%** [Mount Lebanon] — **Primary residences according to type of sanitation means (septic tank)**

Source: Labour Force and Household Living Conditions Survey 2018-2019 (CAS & ILO, 2019).

IN PROFILED DISADVANTAGED NEIGHBOURHOODS

78.5%-98.3% — **Use of improved sanitation (by number of residents)**

10.4%-37.2% — **Streets (by area) with malfunctional wastewater network**

2.8%-13.3% — **Buildings with blocked or no connection to the wastewater network**

SOLID WASTE

YES ✓ — **Public sector-led solid waste secondary sorting operational**

6 — **Municipalities self-reporting existence of waste sorting and recycling**

Sources (in order): UN-Habitat (2021) Desk review; Lebanon Central Inspection & Ministry of Displaced (2021).

ELECTRICITY

99.8% [Beirut governorate]
99.8% [Mount Lebanon]
Percentage distribution of primary residences according to availability of services: Electricity

YES ✓ — **Existence of alternative energy as reported by local authorities, by type**

Sources (in order): Labour Force and Household Living Conditions Survey (CAS & ILO, 2019); Central Inspection Initiative IMPACT Open Data website: Rural development survey of municipalities in Lebanon (Sep 2021).

IN PROFILED DISADVANTAGED NEIGHBOURHOODS

3.4%-56.4% — **Buildings connected with critical defects to the public electrical grid**

4%-32.5% — **Streets (by street area) with no street lighting**

HEALTH

COVID
Includes Baabda, Aley & Metn districts; data unavailable for Beirut district.

18.3% of national population

18.4% of COVID cases nationally

HEALTH CARE CENTRES

147 Primary

28 Secondary

Sources (in order): Central Inspection Initiative IMPACT Open Data website: Rural development survey of municipalities in Lebanon (data gathered Sep 2020; publication Sep 2021); UN-Habitat & UNICEF Neighbourhood Profiles Geoportal, viewed 2021.

IN PROFILED DISADVANTAGED NEIGHBOURHOODS

40.3% - 100%
Care seeking for diarrhoea

CHRONICALLY ILL

of Lebanese: **2.1%-20.1%**
of Non-Lebanese: **0.7%-29.6%**

HEALTH INSURANCE COVERAGE

of Lebanese households: **19.3%-92.1%**
of Non-Lebanese households: **0.7%-29.6%**

EDUCATION

SCHOOLS

146 Public schools

12 UNRWA schools

0% - 30%
(Beirut Municipality not included)
School dropouts among Lebanese children within the municipality, i.e. % youth 4-16 years old outside school system, as reported by the local authority. Range of percents among municipalities comprising each city.

Sources (in order): Central Inspection Initiative IMPACT Open Data website: Rural development survey of municipalities in Lebanon (Sep 2021) as reported by MoPH and reviewed by local authority.

IN PROFILED DISADVANTAGED NEIGHBOURHOODS

56.4%-91.1% — **Primary school attendance among children (6-11)**

27.9%-75.7% — **Secondary school attendance among children (12-17)**

URBAN MOBILITY

20% — **Proportion of the population that has convenient access to public transport**

Source: UN-Habitat Urban Indicators Database (2020).

PUBLIC SPACE

41.6% — **Unbuilt land cover within city perimeter 2021**

36.4 m² per person — **Unbuilt land cover per person 2021**

No data — **Population within 400m walking distance to an open public space**

Sources (in order): Unbuilt area: Global built-up grid for reference year 2018 (10m resolution). GHS stands for Global Human Settlements; S2 refers to the Sentinel2- satellite. Population: Population Package (Inter-Agency Coordination Lebanon (2020) in Lebanon Crisis Response Plan (Government of Lebanon & UN, 2021)). City boundaries (UN-Habitat, 2021); City boundaries 2021: for reference year 2018 cross-referenced and updated to 2021 using Google Earth imagery 2021, viewed 2021.

IN PROFILED DISADVANTAGED NEIGHBOURHOODS

4.8%-27.7% — **Neighbourhood area comprising open spaces**

8.3%-37.4% — **Open spaces (by area) that are publicly used**

48.1%-91.3% — **Open spaces (by area) that are privately used**

PROTECTION

IN PROFILED DISADVANTAGED NEIGHBOURHOODS

2.6%-10.2% — **Lebanese children (5-17) involved in economic activities**

2.7%-15.7% — **Non-Lebanese children (5-17) involved in economic activities**

1.8%-36% — **Young women aged 15-19 who are currently married**

0%-77.8% — **Lebanese children (5-17) involved in economic activities who are exposed to any hazardous work condition**

43%-95.5% — **Non-Lebanese children (5-17) involved in economic activities who are exposed to any hazardous work condition**

SAFETY & SECURITY

20.8% [Beirut Governorate] — **Source of tensions: Competition for services and utilities**

32% [Mount Lebanon Governorate"] — **Source of tensions: Competition for services and utilities**

Source: Regular Perceptions Survey of Social Tensions Throughout Lebanon, Wave XI (UNDP & ARK, August 2021).

IN PROFILED DISADVANTAGED NEIGHBOURHOODS

0.3%-32.7% — **Of Lebanese households that have faced disputes in the area**

0.3%-11.2% — **Of non-Lebanese households that have faced disputes in the area**

CULTURAL HERITAGE

NO ✕ — **CHUD-designated city**

UNESCO designation — **UNESCO Creative Cities Network member designation (2019)**

Antelias - Naqqach Choueifat, Chiyah — **Municipalities in city self-reporting existence of initiatives and projects in past five years to improve tourism sector**

Sources (in order): Desk review (UN-Habitat, 2021); UNESCO website, viewed Aug 2021; Lebanon Central Inspection & Ministry of Displaced (2021) Rural Development Survey, in Impact Open Data website.

For a summary of all data compared across the ten selected cities, see UN-Habitat & ESCWA (2021) The State of Lebanese Cities Report 2021.

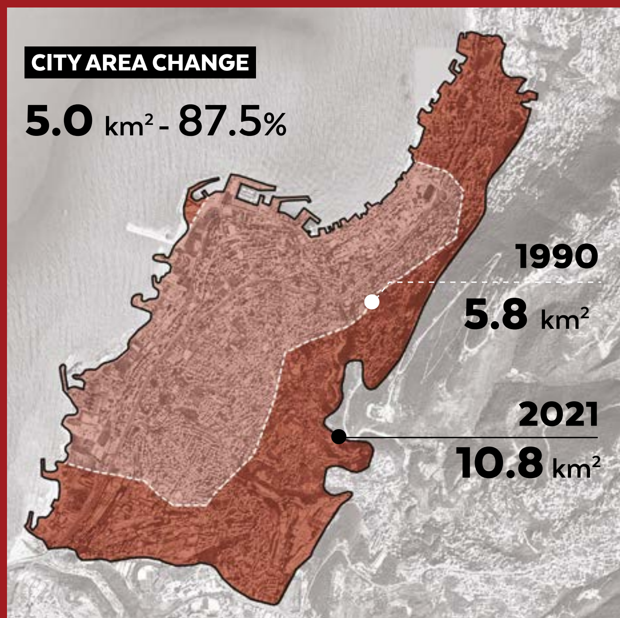
ESCWA | Shared Prosperity Dignified Life | UN-HABITAT FOR A BETTER URBAN FUTURE

JOUNIEH CITY

City dashboards present city-specific multisectoral data relevant to sustainable urban development. They aim to support city decision-makers and stakeholders in designing and monitoring holistic area-based approaches to improving urban wellbeing and resilience within cities. They enable comparison and mutual learning between cities, and highlight the diversity of unique city contexts that make up urban Lebanon.

City boundaries are defined on a working basis according to their continuously built up areas. City population figures are aggregated up from the cadaster-level population dataset agreed between the Government of Lebanon and UN for planning purposes in the Lebanon Crisis Response Plan.

CITY AREA & EXPANSION

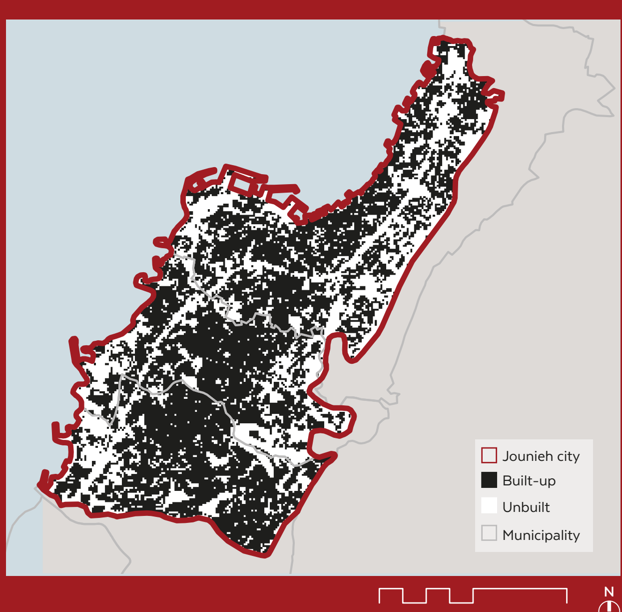


Source: UN-Habitat Lebanon, 2021.

LAND COVER WITHIN CITY PERIMETER 2018

BUILT-UP 6.4 km² (59.1%)

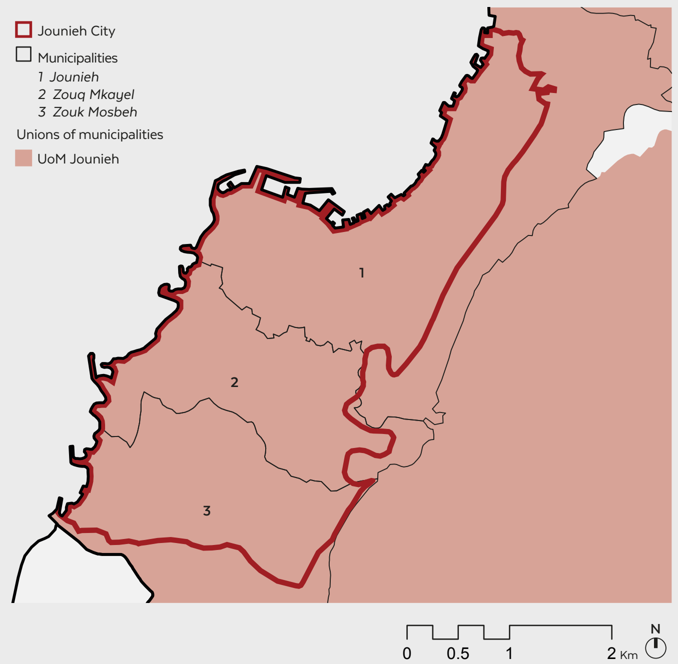
UNBUILT 4.4 km² (40.9%)



Source: Global Human Settlements Layer Dataset: Global built-up grid 2018. City boundaries 2021: for reference year 2018 cross-referenced and updated to 2021 using Google Earth imagery 2021, viewed 2021.

ADMINISTRATIVE CONTEXT

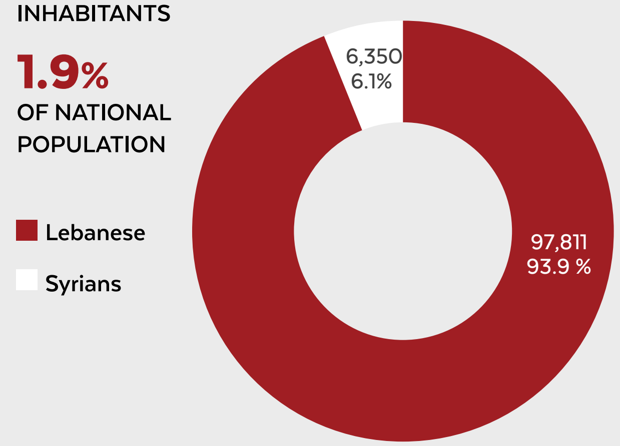
Governorate: Mount Lebanon | **District:** Keserwan



POPULATION

104,161
INHABITANTS

1.9%
OF NATIONAL POPULATION



POPULATION DENSITY

9,635	**Persons per km² of city area (built-up & unbuilt land)**
16,307	**Persons per km² of city area (built-up land only)**

Sources (in order): Population Package (Inter-Agency Coordination Lebanon (2020) in Lebanon Crisis Response Plan (Government of Lebanon & UN, 2021)). City boundaries (UN-Habitat, 2021).

GOVERNING SUSTAINABLE URBAN DEVELOPMENT

Multi-municipality sustainable development strategy in place:
No

NO ✕	**Multi-sectoral city profile related to sustainable urban development exists**
1 Hayy El-Kharoubeh	**Multi-sectoral neighbourhood profiles related to sustainable urban development exist**
0	**Municipal elected mayors who are female**

Sources (in order): UN-Habitat, 2016, 2017; UN-Habitat and UNICEF 2020-2017; Ministry of Interior and Municipalities website, viewed Sep 2021.

POVERTY

4 out of 5 (all except Jounieh Haret Sakhr)	**City cadastres among the 251 most vulnerable in Lebanon**
5 areas	**City cadastres identified as - or containing one or more areas identified as - among the 498 most disadvantaged areas in Lebanon**
0	**UNRWA-managed Palestinian Camps** (12 nationally)



Disadvantaged neighbourhoods profiled by UN-Habitat and UNICEF 2017-2020. The household survey component of this neighbourhood profile was not undertaken leading to data gaps.Read profiles at lebanonportal.unhabitat.org.

18.5% [Keserwan District]	**"Poor or very poor" in self-classification of wealth status survey**

Sources (in order): Inter-agency Coordination Lebanon, 2015; UN-Habitat & UNICEF, 2018; UNRWA website, viewed 2021; Labour Force and Household Living Conditions Survey (CAS & ILO, 2019).

ECONOMY & LIVELIHOODS

10.1% [Keserwan District]	**Labour force unemployment rate**
39.2%/70.7% [Keserwan District]	**Labour force participation rate - Women / Men**

Sources (in order): Lebanon Central Inspection & Ministry of Displaced (2021) Rural Development Survey of municipalities, in IMPACT Open Data website; Labour Force and Household Living Conditions Survey 2018-2019 (CAS & ILO, 2019).

HOUSING

Monthly rent for residential dwelling (Syrian) 2021	LBP **482,487** [Keserwan District]
Ownership of primary residence by one of household members [governorate level]	**64.1%** **Mount Lebanon**
Average residential sales value per sq m (units <=5 years old) 2019 [boundaries of place names not specified]	USD **1,629** [Keserwan District]

Sources (in order): Vulnerability Assessment of Syrian Refugees 2021 (reference date Jun-Jul 2021) (Inter-Agency Coordination Lebanon et al, 2021); Labour Force and Household Living Conditions Survey 2018-2019 (CAS & ILO, 2019) REAL Price Index Survey (Real Estate Syndicate of Lebanon, 2019).

IN THE PROFILED DISADVANTAGED NEIGHBOURHOOD

4.2%

'Buildings in need of major structural repair/emergency intervention (%)' based on neighbourhood profile(s) of most disadvantaged areas

WATER

Beirut & Mount Lebanon WE — **Regional Water Establishment** (RWE)

62% — **Water bill collection rate by regional water establishment** (RWE)

85% — **Drinking water supply network connection rate by regional water establishment**

84.6% [Mount Lebanon] — **Distribution of primary residences** according to availability of services or means & governorates: public water (2018)

Sources (in order): UN-Habitat, 2015; Fanack after MEW, 2010, updated based on personal communication with MEW, 2015; Labour Force and Household Living Conditions Survey (CAS & ILO, 2019).

IN THE PROFILED DISADVANTAGED NEIGHBOURHOOD

No data — **Use of improved drinking water sources** (by number of residents)

0.0% — **Streets (by area) with no domestic water supply**

0.8% — **Buildings not connected to the domestic water network**

WASTEWATER

78.3% [Mount Lebanon] — **Primary residences according to type of sanitation means: Public sewage system**

21.3% [Mount Lebanon] — **Primary residences according to type of sanitation means (septic tank)**

Source: Labour Force and Household Living Conditions Survey 2018-2019 (CAS & ILO, 2019).

IN THE PROFILED DISADVANTAGED NEIGHBOURHOOD

No data — **Use of improved sanitation (by number of residents)**

42.9% — **Streets (by area) with malfunctional wastewater network**

0.0% — **Buildings with blocked or no connection to the wastewater network**

SOLID WASTE

YES ✓ — **Public sector-led solid waste secondary sorting operational**

0 — **Municipalities self-reporting existence of waste sorting and recycling**

Sources (in order): UN-Habitat (2021) Desk review; Lebanon Central Inspection & Ministry of Displaced (2021).

ELECTRICITY

99.8% [Mount Lebanon governorate] — **Percentage distribution of primary residences according to availability of services: Electricity**

NO ✕ — **Existence of alternative energy as reported by local authorities, by type**

Sources (in order): Labour Force and Household Living Conditions Survey (CAS & ILO, 2019); Central Inspection Initiative IMPACT Open Data website: Rural development survey of municipalities in Lebanon (Sep 2021).

IN THE PROFILED DISADVANTAGED NEIGHBOURHOOD

4.2% — **Buildings connected with critical defects to the public electrical grid**

15.6% — **Streets (by street area) with no street lighting**

HEALTH

COVID:
- **1.5%** of national population
- **1.9%** of COVID cases nationally

HEALTH CARE CENTRES:
- **10** Primary
- **1** Secondary

Sources (in order): Central Inspection Initiative IMPACT Open Data website: Rural development survey of municipalities in Lebanon (data gathered Sep 2020; publication Sep 2021); UN-Habitat & UNICEF Neighbourhood Profiles Geoportal, viewed 2021.

EDUCATION

SCHOOLS:
- **8** Public schools
- **0** UNRWA schools

0% - 15%

School dropouts among Lebanese children within the municipality, i.e. % youth 4-16 years old outside school system, as reported by the local authority. Range of percents among municipalities comprising each city.

Sources (in order): Central Inspection Initiative IMPACT Open Data website: Rural development survey of municipalities in Lebanon (Sep 2021) as reported by MoPH and reviewed by local authority.

URBAN MOBILITY

No data — **Proportion of the population that has convenient access to public transport**

PUBLIC SPACE

40.9% — **Unbuilt land cover within city perimeter 2021**

42.5 m² per person — **Unbuilt land cover per person 2021**

No data — **Population within 400m walking distance to an open public space**

Sources (in order): Unbuilt area: Global built-up grid for reference year 2018 (10m resolution). GHS stands for Global Human Settlements; S2 refers to the Sentinel2- satellite. Population: Population Package (Inter-Agency Coordination Lebanon (2020) in Lebanon Crisis Response Plan (Government of Lebanon & UN, 2021)). City boundaries (UN-Habitat, 2021); City boundaries 2021: for reference year 2018 cross-referenced and updated to 2021 using Google Earth imagery 2021, viewed 2021.

IN THE PROFILED DISADVANTAGED NEIGHBOURHOOD

32.2% — **Neighbourhood area comprising open spaces**

1.1% — **Open spaces (by area) that are publicly used**

83.2% — **Open spaces (by area) that are privately used**

SAFETY & SECURITY

32.1% [Mount Lebanon Governorate] — **Source of tensions: Competition for services and utitlies**

Source: Regular Perceptions Survey of Social Tensions Throughout Lebanon, Wave XI (UNDP & ARK, August 2021).

CULTURAL HERITAGE

NO ✕ — **CHUD-designated city**

NO ✕ — **UNESCO Creative Cities Network member designation (2019)**

NO ✕ — **Municipalities in city self-reporting existence of initiatives and projects in past five years to improve tourism sector**

Sources (in order): Desk review (UN-Habitat, 2021); UNESCO website, viewed Aug 2021; Lebanese Central Inspection & Ministry of Displaced (2021) Rural Development Survey, in Impact Open Data website.



Photo of Jounieh. ©Ahmad Chinder, 2021

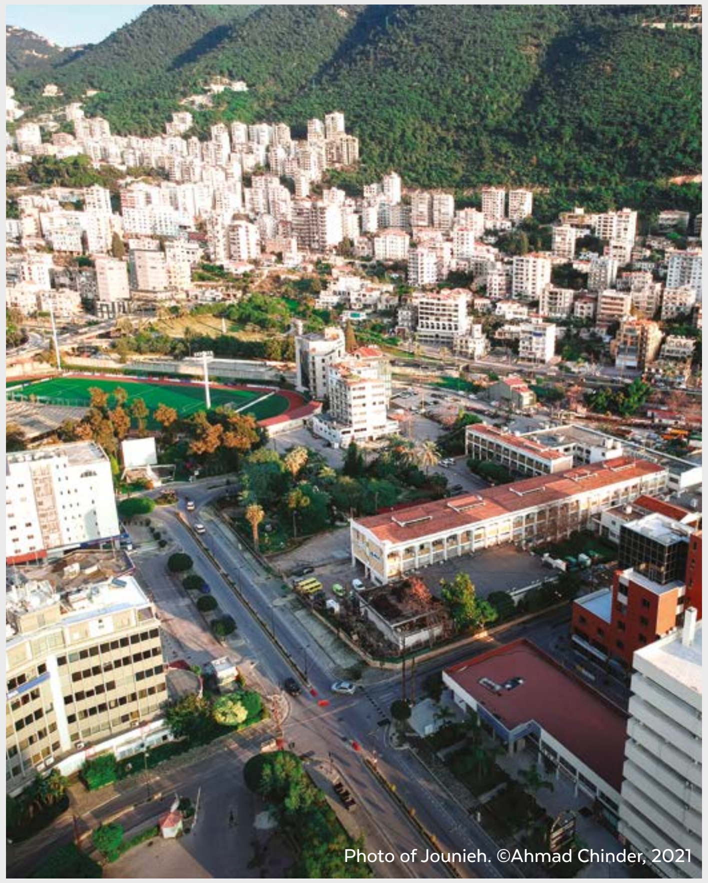


Photo of Jounieh. ©Ahmad Chinder, 2021

For a summary of all data compared across the ten selected cities, see UN-Habitat & ESCWA (2021) The State of Lebanese Cities Report 2021.

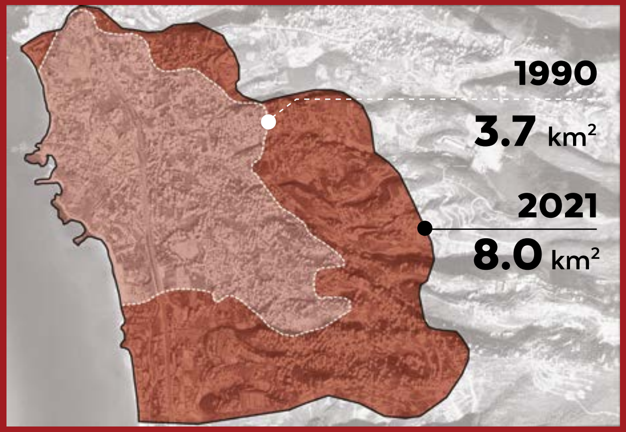
ESCWA — Shared Prosperity Dignified Life — UN-HABITAT FOR A BETTER URBAN FUTURE

BYBLOS CITY

City dashboards present city-specific multisectoral data relevant to sustainable urban development. They aim to support city decision-makers and stakeholders in designing and monitoring holistic area-based approaches to improving urban wellbeing and resilience within cities. They enable comparison and mutual learning between cities, and highlight the diversity of unique city contexts that make up urban Lebanon.

City boundaries are defined on a working basis according to their continuously built up areas. City population figures are aggregated up from the cadaster-level population dataset agreed between the Government of Lebanon and UN for planning purposes in the Lebanon Crisis Response Plan.

CITY AREA & EXPANSION



CITY AREA CHANGE

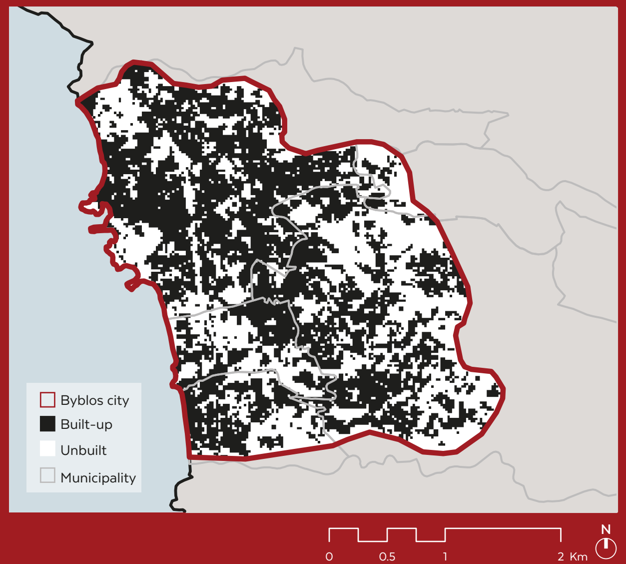
4.2 km² - 114.5%

Source: UN-Habitat Lebanon, 2021.

LAND COVER WITHIN CITY PERIMETER 2018

BUILT-UP 4.3 km² (54.3%)

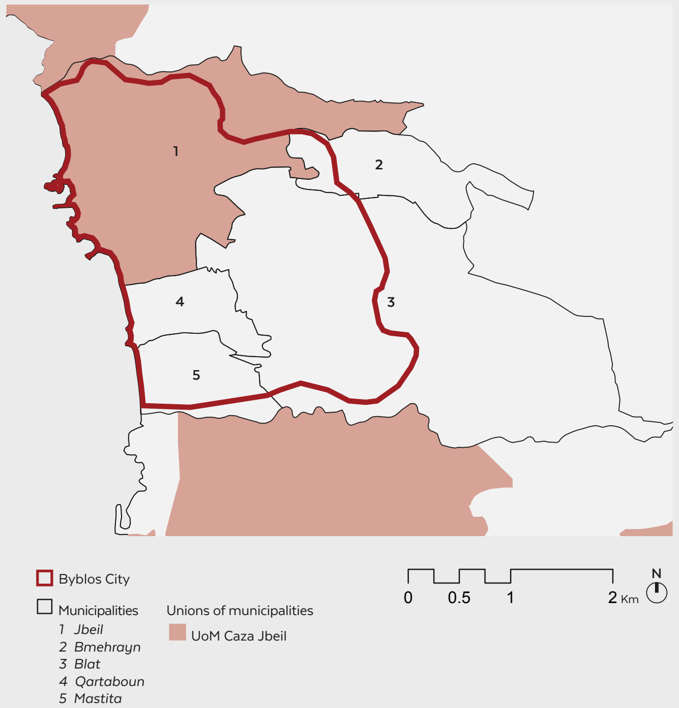
UNBUILT 3.6 km² (45.7%)



Source: Global Human Settlements Layer Dataset: Global built-up grid 2018. City boundaries 2021: for reference year 2018 cross-referenced and updated to 2021 using Google Earth imagery 2021, viewed 2021.

ADMINISTRATIVE CONTEXT

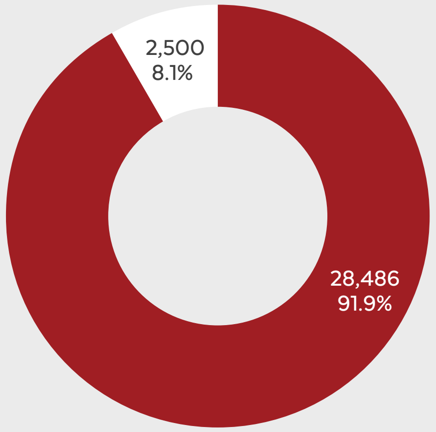
Governorate: Mount Lebanon | **District:** Jbeil



POPULATION

30,985
INHABITANTS

0.6%
OF NATIONAL POPULATION



POPULATION DENSITY

3,891	**Persons per km² of city area (built-up & unbuilt land)**
7,161	**Persons per km² of city area (built-up land only)**

Sources (in order): Population Package (Inter-Agency Coordination Lebanon (2020) in Lebanon Crisis Response Plan (Government of Lebanon & UN, 2021)). City boundaries (UN-Habitat, 2021).

GOVERNING SUSTAINABLE URBAN DEVELOPMENT

Multi-municipality sustainable development strategy in place: A 'Resilient Byblos' Strategy exists but limited to Byblos Municipality (published 2015)

NO ✕	**Multi-sectoral city profile related to sustainable urban development exists**
NO ✕	**Multi-sectoral neighbourhood profiles related to sustainable urban development exist**
0	**Municipal elected mayors who are female**

Sources (in order): UN-Habitat, 2016, 2017; UN-Habitat and UNICEF 2017-2020; Ministry of Interior and Municipalities website, viewed Sep 2021.

POVERTY

1 out of 5 (Jbeil cadastre)	**City cadastres among the 251 most vulnerable in Lebanon**
0 areas	**City cadastres identified as -** or containing one or more areas identified as **- among the 498 most disadvantaged areas in Lebanon**
0	**UNRWA-managed Palestinian Camps** (12 nationally)
12.7% [Jbeil District]	**"Poor or very poor" in self-classification of wealth status survey**

ECONOMY & LIVELIHOODS

11.6% [Jbeil District]	**Labour force unemployment rate**
42.2%/70.9% [Jbeil District]	**Labour force participation rate - Women / Men**

Sources (in order): Lebanon Central Inspection & Ministry of Displaced (2021) Rural Development Survey of municipalities, in IMPACT Open Data website; Labour Force and Household Living Conditions Survey 2018-2019 (CAS & ILO, 2019).

HOUSING

Monthly rent for residential dwelling (Syrian) 2021	LBP **439,496** [Jbeil District]
Ownership of primary residence by one of household members [governorate level]	**64.1%** **Mount Lebanon**
Average residential sales value per sq m (units <=5 years old) 2019 [boundaries of place names not specified]	USD **1,074** [Byblos District]

Sources (in order): Vulnerability Assessment of Syrian Refugees 2021 (reference date Jun-Jul 2021) (Inter-Agency Coordination Lebanon et al, 2021); Labour Force and Household Living Conditions Survey 2018-2019 (CAS & ILO, 2019) REAL Price Index Survey (Real Estate Syndicate of Lebanon, 2019).

WATER

North WE	**Regional Water Establishment** (RWE)
58%	**Water bill collection rate by regional water establishment** (RWE)
68%	**Drinking water supply network connection rate by regional water establishment**
84.6% [Mount Lebanon]	**Distribution of primary residences** according to availability of services or means & governorates: public water (2018)

Sources (in order): UN-Habitat, 2015; Fanack after MEW, 2010, updated based on personal communication with MEW, 2015; Labour Force and Household Living Conditions Survey (CAS & ILO, 2019).

WASTEWATER

78.3% [Mount Lebanon]	**Primary residences according to type of sanitation means: Public sewage system**
21.3% [Mount Lebanon]	**Primary residences according to type of sanitation means (septic tank)**

Source: Labour Force and Household Living Conditions Survey 2018-2019 (CAS & ILO, 2019).

SOLID WASTE

NO ✕ — **Public sector-led solid waste secondary sorting operational**

1 — **Municipalities self-reporting existence of waste sorting and recycling**

Sources (in order): UN-Habitat (2021) Desk review; Lebanon Central Inspection & Ministry of Displaced (2021).

ELECTRICITY

99.8% [Mount Lebanon governorate] — **Percentage distribution of primary residences according to availability of services: Electricity**

YES ✓ Jbeil Municipality - Solar — **Existence of alternative energy as reported by local authorities, by type**

Sources (in order): Labour Force and Household Living Conditions Survey (CAS & ILO, 2019); Central Inspection Initiative IMPACT Open Data website: Rural development survey of municipalities in Lebanon (Sep 2021).

HEALTH

COVID
- **0.6%** of national population
- **0.6%** of COVID cases nationally

HEALTH CARE CENTRES
- **4** Primary
- **3** Secondary

Sources (in order): Central Inspection Initiative IMPACT Open Data website: Rural development survey of municipalities in Lebanon (data gathered Sep 2020; publication Sep 2021); UN-Habitat & UNICEF Neighbourhood Profiles Geoportal, viewed 2021.

EDUCATION

SCHOOLS
- **5** Public schools
- **0** UNRWA schools

8% - 8%

School dropouts among Lebanese children within the municipality, i.e. % youth 4-16 years old outside school system, as reported by the local authority. Range of percents among municipalities comprising each city.

Sources (in order): Central Inspection Initiative IMPACT Open Data website: Rural development survey of municipalities in Lebanon (Sep 2021) as reported by MoPH and reviewed by local authority.

URBAN MOBILITY

No data — **Proportion of the population that has convenient access to public transport**

PUBLIC SPACE

45.7% — **Unbuilt land cover within city perimeter 2021**

117.3 m^2 per person — **Unbuilt land cover per person 2021**

No data — **Population within 400m walking distance to an open public space**

Sources (in order): Unbuilt area: Global built-up grid for reference year 2018 (10m resolution). GHS stands for Global Human Settlements; S2 refers to the Sentinel2- satellite. Population: Population Package (Inter-Agency Coordination Lebanon (2020) in Lebanon Crisis Response Plan (Government of Lebanon & UN, 2021)). City boundaries (UN-Habitat, 2021); City boundaries 2021: for reference year 2018 cross-referenced and updated to 2021 using Google Earth imagery 2021, viewed 2021.

SAFETY & SECURITY

32.1% [Mount Lebanon Governorate] — **Source of tensions: Competition for services and utilities**

Source: Regular Perceptions Survey of Social Tensions Throughout Lebanon, Wave XI (UNDP & ARK, August 2021).

CULTURAL HERITAGE

YES ✓ — **CHUD-designated city**

UNESCO designation — **UNESCO World Heritage Site - Cultural type designation (1984)**

Jbeil — **Municipalities in city self-reporting existence of initiatives and projects in past five years to improve tourism sector**

Sources (in order): Desk review (UN-Habitat, 2021); UNESCO website, viewed Aug 2021; Lebanon Central Inspection & Ministry of Displaced (2021) Rural Development Survey, in Impact Open Data website.



Photo of Byblos. ©Ahmad Chinder, 2021



Photo of Byblos. ©Ahmad Chinder, 2021

For a summary of all data compared across the ten selected cities, see UN-Habitat & ESCWA (2021) The State of Lebanese Cities Report 2021.

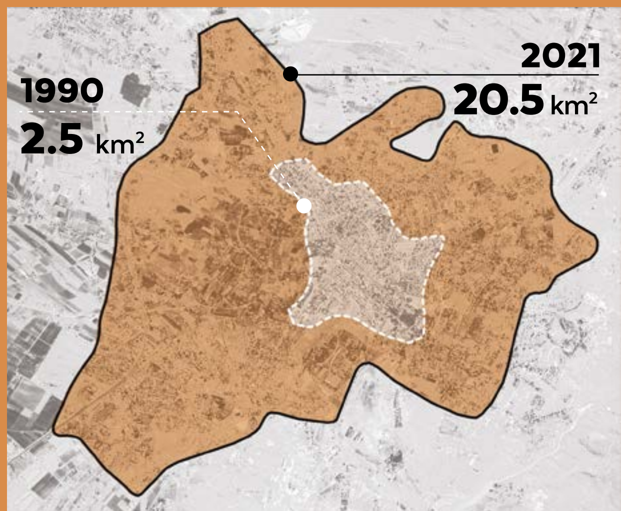
ESCWA — Shared Prosperity Dignified Life — UN-HABITAT FOR A BETTER URBAN FUTURE

BAALBEK CITY

City dashboards present city-specific multisectoral data relevant to sustainable urban development. They aim to support city decision-makers and stakeholders in designing and monitoring holistic area-based approaches to improving urban wellbeing and resilience within cities. They enable comparison and mutual learning between cities, and highlight the diversity of unique city contexts that make up urban Lebanon.

City boundaries are defined on a working basis according to their continuously built up areas. City population figures are aggregated up from the cadaster-level population dataset agreed between the Government of Lebanon and UN for planning purposes in the Lebanon Crisis Response Plan.

CITY AREA & EXPANSION



CITY AREA CHANGE

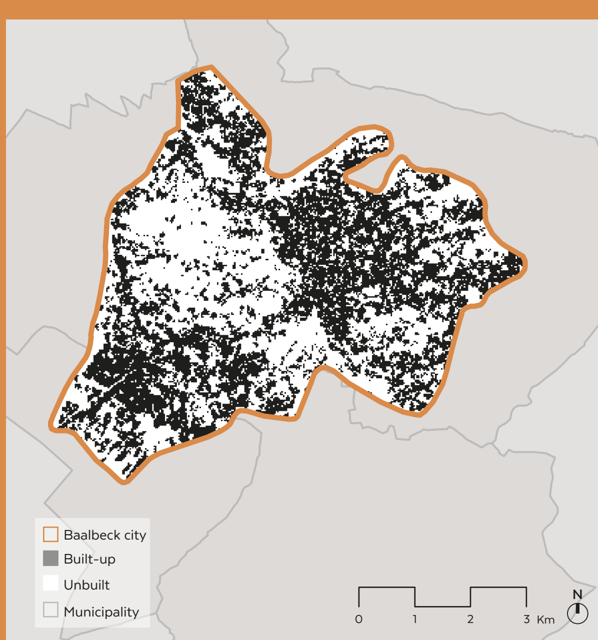
18.0 km² - 717%

Source: UN-Habitat Lebanon, 2021.

LAND COVER WITHIN CITY PERIMETER 2018

BUILT-UP 9.4 km² (45.9%)

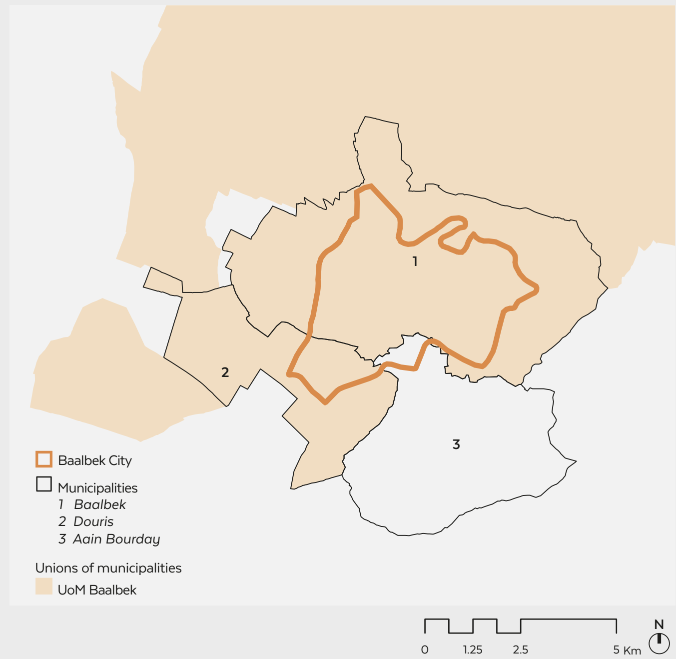
UNBUILT 11.1 km² (54.1%)



Source: Global Human Settlements Layer Dataset: Global built-up grid 2018. City boundaries 2021: for reference year 2018 cross-referenced and updated to 2021 using Google Earth imagery 2021, viewed 2021.

ADMINISTRATIVE CONTEXT

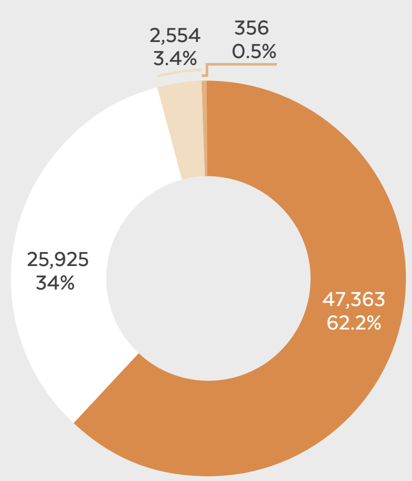
Governorate: Baalbek El-Hermel | **District:** Baalbek



POPULATION

76,199
INHABITANTS

1.4%
OF NATIONAL POPULATION



POPULATION DENSITY

3,722	**Persons per km² of city area (built-up & unbuilt land)**
8,105	**Persons per km² of city area (built-up land only)**

Sources (in order): Population Package (Inter-Agency Coordination Lebanon (2020) in Lebanon Crisis Response Plan (Government of Lebanon & UN, 2021)). City boundaries (UN-Habitat, 2021).

GOVERNING SUSTAINABLE URBAN DEVELOPMENT

Multi-municipality sustainable development strategy in place:
No

NO ✕ — **Multi-sectoral city profile related to sustainable urban development exists**

3 (Shoaab, Mogher El-Taheen, El-Soleh Sahet El-Naser) — **Multi-sectoral neighbourhood profiles related to sustainable urban development exist**

0 — **Municipal elected mayors who are female**

Sources (in order): UN-Habitat, 2016, 2017; UN-Habitat and UNICEF 2017-2020; Ministry of Interior and Municipalities website, viewed Sep 2021.

POVERTY

2 out of 3 (Douris, Baalbek in 1st quantile of 251) — **City cadastres among the 251 most vulnerable in Lebanon**

7 areas — **City cadastres identified as - or containing one or more areas identified as - among the 498 most disadvantaged areas in Lebanon**

1 Wavel Camp — **UNRWA-managed Palestinian Camps** (12 nationally)



Disadvantaged neighbourhoods profiled by UN-Habitat and UNICEF 2017-2020. Read profiles at lebanonportal.unhabitat.org.

40.6% [Baalbek District] — **"Poor or very poor" in self-classification of wealth status survey**

Sources (in order): Inter-agency Coordination Lebanon, 2015; UN-Habitat & UNICEF, 2018; UNRWA website, viewed 2021; Labour Force and Household Living Conditions Survey (CAS & ILO, 2019).

ECONOMY & LIVELIHOODS

11.1% [Baalbek District] — **Labour force unemployment rate**

21.9%/68.2% [Baalbek District] — **Labour force participation rate - Women / Men**

Sources (in order): Lebanon Central Inspection & Ministry of Displaced (2021) Rural Development Survey of municipalities, in IMPACT Open Data website; Labour Force and Household Living Conditions Survey 2018-2019 (CAS & ILO, 2019).

HOUSING

Monthly rent for residential dwelling (Syrian) 2021	LBP **276,330** [Baalbek District]
Ownership of primary residence by one of household members [governorate level]	**84.1%** **Baalbek El-Hermel**
Average residential sales value per sq m (units <=5 years old) 2019 [boundaries of place names not specified]	No data

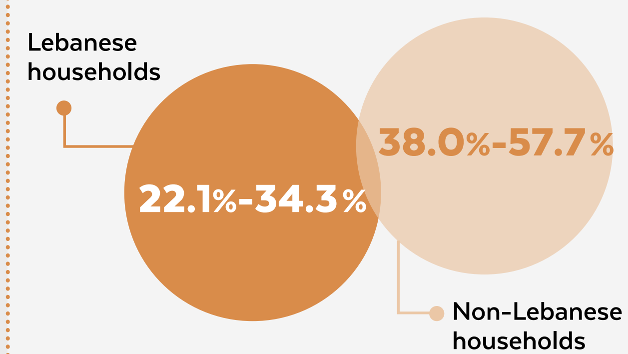
Sources (in order): Vulnerability Assessment of Syrian Refugees 2021 (reference date Jun-Jul 2021) (Inter-Agency Coordination Lebanon et al, 2021); Labour Force and Household Living Conditions Survey 2018-2019 (CAS & ILO, 2019) REAL Price Index Survey (Real Estate Syndicate of Lebanon, 2019).

IN THE PROFILED DISADVANTAGED NEIGHBOURHOOD

11.1% - 34.6%

'Buildings in need of major structural repair/emergency intervention (%)' based on neighbourhood profile(s) of most disadvantaged areas

PROPORTION OF OVERCROWDING



WATER

Bekaa WE — **Regional Water Establishment** (RWE)

18% — **Water bill collection rate by regional water establishment** (RWE)

62% — **Drinking water supply network connection rate by regional water establishment**

69% [Baalbek-El Hermel] — **Distribution of primary residences** according to availability of services or means & governorates: public water (2018)

Sources (in order): UN-Habitat, 2015; Fanack after MEW, 2010, updated based on personal communication with MEW, 2015; Labour Force and Household Living Conditions Survey (CAS & ILO, 2019).

IN PROFILED DISADVANTAGED NEIGHBOURHOODS

87.6%-99.3%	**Use of improved drinking water sources** (by number of residents)
0%-18.3%	**Streets (by area) with no domestic water supply**
1.2%-7.8%	**Buildings not connected to the domestic water network**

WASTEWATER

47.1% [Baalbek-El Hermel] — **Primary residences according to type of sanitation means: Public sewage system**

52.5% [Baalbek-El Hermel] — **Primary residences according to type of sanitation means (septic tank)**

Source: Labour Force and Household Living Conditions Survey 2018-2019 (CAS & ILO, 2019).

IN PROFILED DISADVANTAGED NEIGHBOURHOODS

65.2%-87.7%	**Use of improved sanitation (by number of residents)**
7.6%-39.9%	**Streets (by area) with malfunctional wastewater network**
0.5%-17.8%	**Buildings with blocked or no connection to the wastewater network**

SOLID WASTE

NO ✗ — **Public sector-led solid waste secondary sorting operational**

1 — **Municipalities self-reporting existence of waste sorting and recycling**

Sources (in order): UN-Habitat (2021) Desk review; Lebanon Central Inspection & Ministry of Displaced (2021).

ELECTRICITY

99.7% [Baalbek -El-Hermel Governorate] — **Percentage distribution of primary residences according to availability of services: Electricity**

YES ✓ Baalbek Municipality - Solar — **Existence of alternative energy as reported by local authorities, by type**

Sources (in order): Labour Force and Household Living Conditions Survey (CAS & ILO, 2019); Central Inspection Initiative IMPACT Open Data website: Rural development survey of municipalities in Lebanon (Sep 2021).

IN PROFILED DISADVANTAGED NEIGHBOURHOODS

10.8%-15.4%	**Buildings connected with critical defects to the public electrical grid**
3.2%-9.6%	**Streets (by street area) with no street lighting**

HEALTH

COVID
- **1.4%** of national population
- **1.4%** of COVID cases nationally

HEALTH CARE CENTRES
- **6** Primary
- **3** Secondary

Sources (in order): Central Inspection Initiative IMPACT Open Data website: Rural development survey of municipalities in Lebanon (data gathered Sep 2020; publication Sep 2021); UN-Habitat & UNICEF Neighbourhood Profiles Geoportal, viewed 2021.

IN PROFILED DISADVANTAGED NEIGHBOURHOODS

14.5% - 85.7%
Care seeking for diarrhoea

CHRONICALLY ILL
- of Lebanese: **14.2%-20%**
- of Non-Lebanese: **8%-19.3%**

HEALTH INSURANCE COVERAGE
- of Lebanese households: **20.4%-35.6%**
- of Non-Lebanese households: **0.9%-15.2%**

EDUCATION

SCHOOLS
- **12** Public schools
- **2** UNRWA schools

10% - 30%
School dropouts among Lebanese children within the municipality, i.e. % youth 4-16 years old outside school system, as reported by the local authority. Range of percents among municipalities comprising each city.

Sources (in order): Central Inspection Initiative IMPACT Open Data website: Rural development survey of municipalities in Lebanon (Sep 2021) as reported by MoPH and reviewed by local authority.

IN PROFILED DISADVANTAGED NEIGHBOURHOODS

74%-82%	**Primary school attendance among children (6-11)**
49%-63.8%	**Secondary school attendance among children (12-17)**

URBAN MOBILITY

8.2% — **Proportion of the population that has convenient access to public transport**

Source: UN-Habitat Urban Indicators Database (2020).

PUBLIC SPACE

54.1% — **Unbuilt land cover within city perimeter 2021**

145.3 m² per person — **Unbuilt land cover per person 2021**

45.2% — **Population within 400m walking distance to an open public space**

Sources (in order): Unbuilt area: Global built-up grid for reference year 2018 (10m resolution). GHS stands for Global Human Settlements; S2 refers to the Sentinel2- satellite. Population: Population Package (Inter-Agency Coordination Lebanon (2020) in Lebanon Crisis Response Plan (Government of Lebanon & UN, 2021)). City boundaries (UN-Habitat, 2021); City boundaries 2021: for reference year 2018 cross-referenced and updated to 2021 using Google Earth imagery 2021, viewed 2021.

IN PROFILED DISADVANTAGED NEIGHBOURHOODS

25.7%-34.2%	**Neighbourhood area comprising open spaces**
4.6%-35.2%	**Open spaces (by area) that are publicly used**
64.8%-95.4%	**Open spaces (by area) that are privately used**

PROTECTION

IN PROFILED DISADVANTAGED NEIGHBOURHOODS

3.3%-9.6%	**Lebanese children (5-17) involved in economic activities**
2.9%-15.5%	**Non-Lebanese children (5-17) involved in economic activities**
3.8%-11.8%	**Young women aged 15-19 who are currently married**
45.5%-57.1%	**Lebanese children (5-17) involved in economic activities who are exposed to any hazardous work condition**
38.9%-53.9%	**Non-Lebanese children (5-17) involved in economic activities who are exposed to any hazardous work condition**

SAFETY & SECURITY

66% [Baalbek-El Hermel Governorate] — **Source of tensions: Competition for services and utilities**

Source: Regular Perceptions Survey of Social Tensions Throughout Lebanon, Wave XI (UNDP & ARK, August 2021).

IN PROFILED DISADVANTAGED NEIGHBOURHOODS

0.7%-2.9%	**Of Lebanese households that have faced disputes in the area**
0.6%-5.4%	**Of non-Lebanese households that have faced dispuAtes in the area**

CULTURAL HERITAGE

YES ✓ — **CHUD-designated city**

UNESCO designation — **UNESCO World Heritage Site - Cultural type designation (1984)**

Baalbek — **Municipalities in city self-reporting existence of initiatives and projects in past five years to improve tourism sector**

Sources (in order): Desk review (UN-Habitat, 2021); UNESCO website, viewed Aug 2021; Lebanon Central Inspection & Ministry of Displaced (2021) Rural Development Survey, in Impact Open Data website.

For a summary of all data compared across the ten selected cities, see UN-Habitat & ESCWA (2021) The State of Lebanese Cities Report 2021.

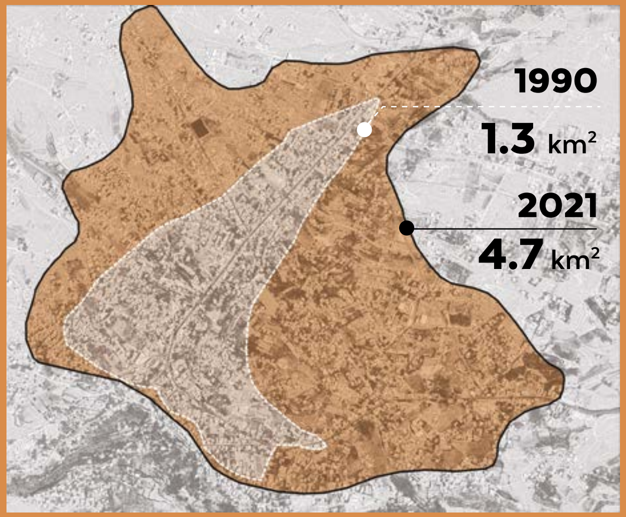
ESCWA — Shared Prosperity Dignified Life — UN-HABITAT FOR A BETTER URBAN FUTURE

HERMEL CITY

City dashboards present city-specific multisectoral data relevant to sustainable urban development. They aim to support city decision-makers and stakeholders in designing and monitoring holistic area-based approaches to improving urban wellbeing and resilience within cities. They enable comparison and mutual learning between cities, and highlight the diversity of unique city contexts that make up urban Lebanon.

City boundaries are defined on a working basis according to their continuously built up areas. City population figures are aggregated up from the cadaster-level population dataset agreed between the Government of Lebanon and UN for planning purposes in the Lebanon Crisis Response Plan.

CITY AREA & EXPANSION



CITY AREA CHANGE

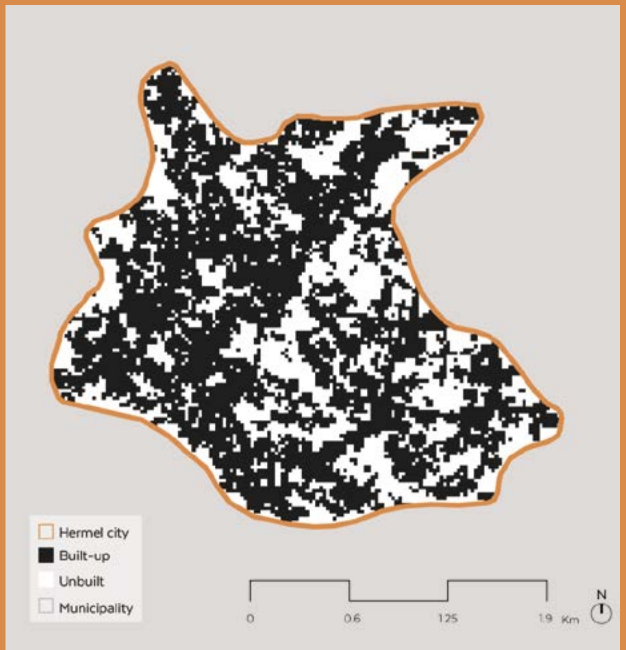
3.4 km² - **249.7%**

Source: UN-Habitat Lebanon, 2021.

LAND COVER WITHIN CITY PERIMETER 2018

BUILT-UP 2.8 km² (58.4%)

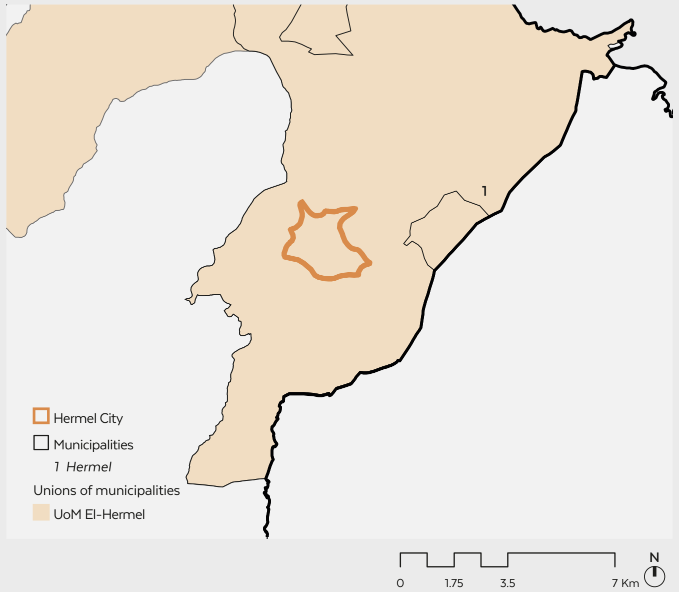
UNBUILT 2.0 km² (41.6%)



Source: Global Human Settlements Layer Dataset: Global built-up grid 2018. City boundaries 2021: for reference year 2018 cross-referenced and updated to 2021 using Google Earth imagery 2021, viewed 2021.

ADMINISTRATIVE CONTEXT

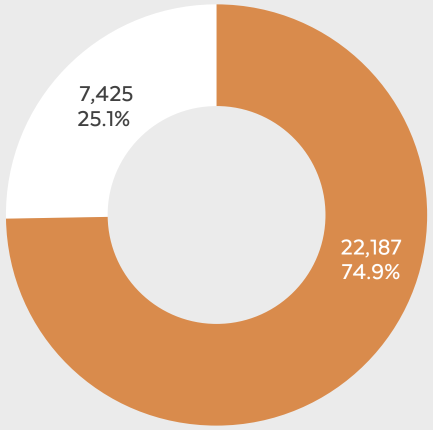
Governorate: Baalbek El-Hermel | **District:** Hermel



POPULATION

29,612
INHABITANTS

0.5%
OF NATIONAL POPULATION



POPULATION DENSITY

6,286	**Persons per km² of city area (built-up & unbuilt land)**
10,766	**Persons per km² of city area (built-up land only)**

Sources (in order): Population Package (Inter-Agency Coordination Lebanon (2020) in Lebanon Crisis Response Plan (Government of Lebanon & UN, 2021)). City boundaries (UN-Habitat, 2021).

GOVERNING SUSTAINABLE URBAN DEVELOPMENT

Multi-municipality sustainable development strategy in place:
No

NO ✕ **Multi-sectoral city profile related to sustainable urban development exists**

NO ✕ **Multi-sectoral neighbourhood profiles related to sustainable urban development exist**

0 **Municipal elected mayors who are female**

Sources (in order): UN-Habitat, 2016, 2017; UN-Habitat and UNICEF 2017-2020; Ministry of Interior and Municipalities website, viewed Sep 2021.

POVERTY

1 out of 1 (Hermel in 1st quantile of 251) — **City cadastres among the 251 most vulnerable in Lebanon**

1 area — **City cadastres identified as - or** containing one or more areas identified as **- among the 498 most disadvantaged areas in Lebanon**

0 — **UNRWA-managed Palestinian Camps** (12 nationally)

47.1% [Hermel District] — **"Poor or very poor" in self-classification of wealth status survey**

Sources (in order): Inter-agency Coordination Lebanon, 2015; UN-Habitat & UNICEF, 2018; UNRWA website, viewed 2021; Labour Force and Household Living Conditions Survey (CAS & ILO, 2019).

ECONOMY & LIVELIHOODS

11.2% [Hermel District] — **Labour force unemployment rate**

18.2%/62.2% [Hermel District] — **Labour force participation rate - Women / Men**

Sources (in order): Lebanon Central Inspection & Ministry of Displaced (2021) Rural Development Survey of municipalities, in IMPACT Open Data website; Labour Force and Household Living Conditions Survey 2018-2019 (CAS & ILO, 2019).

HOUSING

Monthly rent for residential dwelling (Syrian) 2021 — LBP **256,369** [Hermel District]

Ownership of primary residence by one of household members [governorate level] — **84.1%** **Baalbek El-Hermel**

Average residential sales value per sq m (units <=5 years old) 2019 [boundaries of place names not specified] — No data

Sources (in order): Vulnerability Assessment of Syrian Refugees 2021 (reference date Jun-Jul 2021) (Inter-Agency Coordination Lebanon et al, 2021); Labour Force and Household Living Conditions Survey 2018-2019 (CAS & ILO, 2019) REAL Price Index Survey (Real Estate Syndicate of Lebanon, 2019).

WATER

Bekaa WE — **Regional Water Establishment** (RWE)

18% — **Water bill collection rate by regional water establishment** (RWE)

62% — **Drinking water supply network connection rate by regional water establishment**

69% [Baalbek-El Hermel] — **Distribution of primary residences** according to availability of services or means & governorates: public water (2018)

Sources (in order): UN-Habitat, 2015; Fanack after MEW, 2010, updated based on personal communication with MEW, 2015; Labour Force and Household Living Conditions Survey (CAS & ILO, 2019).

WASTEWATER

47.1% [Baalbek-El Hermel] — **Primary residences according to type of sanitation means: Public sewage system**

52.5% [Baalbek-El Hermel] — **Primary residences according to type of sanitation means (septic tank)**

Source: Labour Force and Household Living Conditions Survey 2018-2019 (CAS & ILO, 2019).

SOLID WASTE

NO ✕ — **Public sector-led solid waste secondary sorting operational**

0 — **Municipalities self-reporting existence of waste sorting and recycling**

Sources (in order): UN-Habitat (2021) Desk review; Lebanon Central Inspection & Ministry of Displaced (2021).

ELECTRICITY

99.7% [Baalbek -El-Hermel Governorate] — **Percentage distribution of primary residences according to availability of services: Electricity**

YES ✓ Hermel Municipality - Solar — **Existence of alternative energy as reported by local authorities, by type**

Sources (in order): Labour Force and Household Living Conditions Survey (CAS & ILO, 2019); Central Inspection Initiative IMPACT Open Data website: Rural development survey of municipalities in Lebanon (Sep 2021).

HEALTH

COVID
- 0.5% of national population
- 1% of COVID cases nationally

HEALTH CARE CENTRES
- 5 Primary
- 1 Secondary

Sources (in order): Central Inspection Initiative IMPACT Open Data website: Rural development survey of municipalities in Lebanon (data gathered Sep 2020; publication Sep 2021); UN-Habitat & UNICEF Neighbourhood Profiles Geoportal, viewed 2021.

EDUCATION

SCHOOLS
- 5 Public schools
- 0 UNRWA schools

29% **School dropouts among Lebanese children within the municipality,** i.e. % youth 4-16 years old outside school system, as reported by the local authority. Range of percents among municipalities comprising each city.

Sources (in order): Central Inspection Initiative IMPACT Open Data website: Rural development survey of municipalities in Lebanon (Sep 2021) as reported by MoPH and reviewed by local authority.

URBAN MOBILITY

No data — **Proportion of the population that has convenient access to public transport**

Source: UN-Habitat Urban Indicators Database (2020).

PUBLIC SPACE

41.6% — **Unbuilt land cover within city perimeter 2021**

66.2 m^2 per person — **Unbuilt land cover per person 2021**

No data — **Population within 400m walking distance to an open public space**

Sources (in order): Unbuilt area: Global built-up grid for reference year 2018 (10m resolution). GHS stands for Global Human Settlements; S2 refers to the Sentinel2- satellite. Population: Population Package (Inter-Agency Coordination Lebanon (2020) in Lebanon Crisis Response Plan (Government of Lebanon & UN, 2021)). City boundaries (UN-Habitat, 2021); City boundaries 2021: for reference year 2018 cross-referenced and updated to 2021 using Google Earth imagery 2021, viewed 2021.

SAFETY & SECURITY

66% [Baalbek-El Hermel Governorate] — **Source of tensions: Competition for services and utilities**

Source: Regular Perceptions Survey of Social Tensions Throughout Lebanon, Wave XI (UNDP & ARK, August 2021).

CULTURAL HERITAGE

NO ✕ — **CHUD-designated city**

NO ✕ — **UNESCO Creative Cities Network member designation (2019)**

Hermel — **Municipalities in city self-reporting existence of initiatives and projects in past five years to improve tourism sector**

Sources (in order): Desk review (UN-Habitat, 2021); UNESCO website, viewed Aug 2021; Lebanon Central Inspection & Ministry of Displaced (2021) Rural Development Survey, in Impact Open Data website.


Photo in Hermel. ©Maya Mazboudi for Legal Agenda, 2021


Photo in Hermel. ©Kamel Jaber for Legal Agenda, 2021

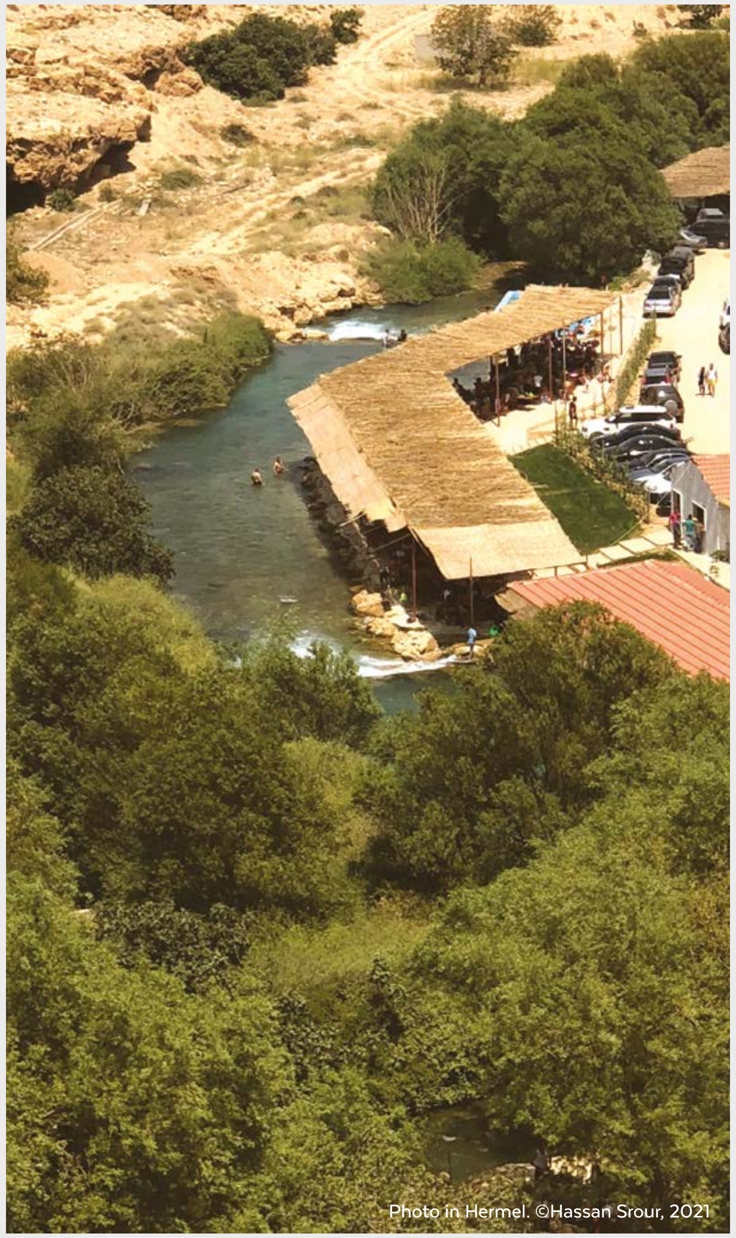

Photo in Hermel. ©Hassan Srour, 2021


Photo in Hermel. ©Hassan Srour, 2021


Photo in Hermel. ©Hassan Srour, 2021

For a summary of all data compared across the ten selected cities, see UN-Habitat & ESCWA (2021) The State of Lebanese Cities Report 2021.

ESCWA — Shared Prosperity Dignified Life — UN-HABITAT FOR A BETTER URBAN FUTURE

ZAHLEH CITY

City dashboards present city-specific multisectoral data relevant to sustainable urban development. They aim to support city decision-makers and stakeholders in designing and monitoring holistic area-based approaches to improving urban wellbeing and resilience within cities. They enable comparison and mutual learning between cities, and highlight the diversity of unique city contexts that make up urban Lebanon.

City boundaries are defined on a working basis according to their continuously built up areas. City population figures are aggregated up from the cadaster-level population dataset agreed between the Government of Lebanon and UN for planning purposes in the Lebanon Crisis Response Plan.

CITY AREA & EXPANSION



CITY AREA CHANGE

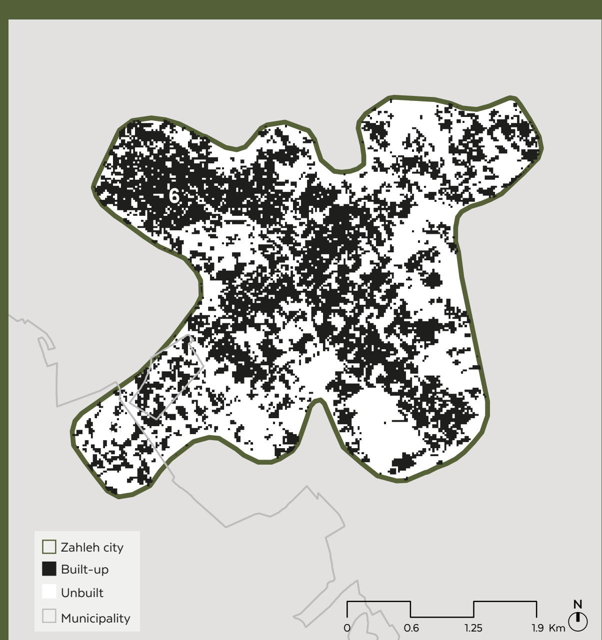
6.6 km² - **132.5%**

Source: UN-Habitat Lebanon, 2021.

LAND COVER WITHIN CITY PERIMETER 2018

BUILT-UP 5.0 km² (43.2%)

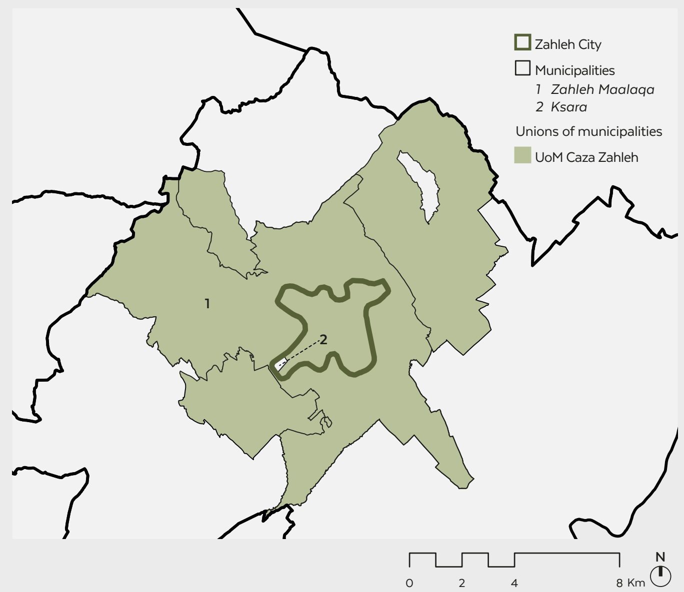
UNBUILT 6.6 km² (56.8%)



Source: Global Human Settlements Layer Dataset: Global built-up grid 2018. City boundaries 2021: for reference year 2018 cross-referenced and updated to 2021 using Google Earth imagery 2021, viewed 2021.

ADMINISTRATIVE CONTEXT

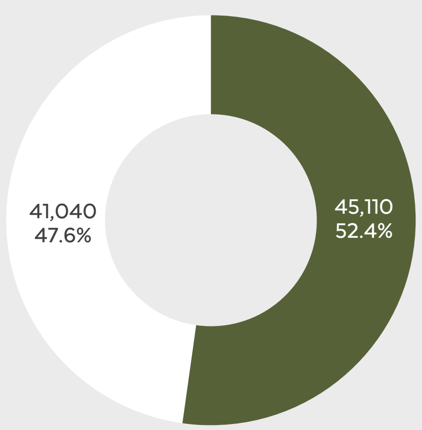
Governorate: Bekaa | District: Zahleh



POPULATION

86,149
INHABITANTS

1.5%
OF NATIONAL POPULATION



POPULATION DENSITY

17,204 Persons per km² of city area (built-up & unbuilt land)

16,845 Persons per km² of city area (built-up land only)

Sources (in order): Population Package (Inter-Agency Coordination Lebanon (2020) in Lebanon Crisis Response Plan (Government of Lebanon & UN, 2021)). City boundaries (UN-Habitat, 2021).

GOVERNING SUSTAINABLE URBAN DEVELOPMENT

Multi-municipality sustainable development strategy in place:
No

NO ✕ — **Multi-sectoral city profile related to sustainable urban development exists**

1 (Haoush El-Oumara) — **Multi-sectoral neighbourhood profiles related to sustainable urban development exist**

0 — **Municipal elected mayors who are female**

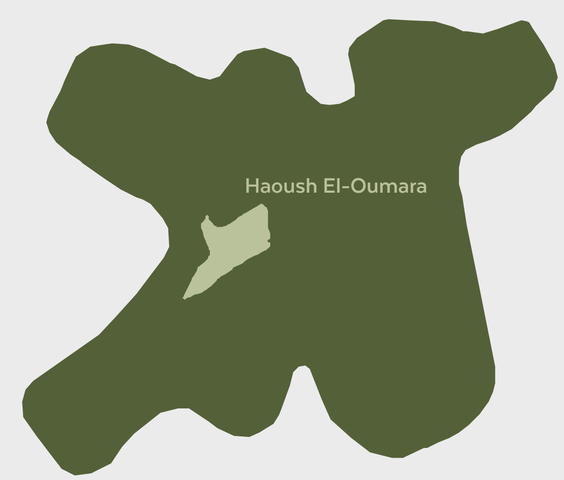
Sources (in order): UN-Habitat, 2016, 2017; UN-Habitat and UNICEF 2017-2020; Ministry of Interior and Municipalities website, viewed Sep 2021.

POVERTY

4 out of 16 — **City cadastres among the 251 most vulnerable in Lebanon**

1 area — **City cadastres identified as - or** containing one or more areas identified as - **among the 498 most disadvantaged areas in Lebanon**

0 — **UNRWA-managed Palestinian Camps** (12 nationally)



Disadvantaged neighbourhoods profiled by UN-Habitat and UNICEF 2017-2020. Read profiles at lebanonportal.unhabitat.org.

37.7% [Zahleh District] — **"Poor or very poor" in self-classification of wealth status survey**

Sources (in order): Inter-agency Coordination Lebanon, 2015; UN-Habitat & UNICEF, 2018; UNRWA website, viewed 2021; Labour Force and Household Living Conditions Survey (CAS & ILO, 2019).

ECONOMY & LIVELIHOODS

14.4% [Zahleh District] — **Labour force unemployment rate**

21.3%/72.8% [Zahleh District] — **Labour force participation rate - Women / Men**

Sources (in order): Lebanon Central Inspection & Ministry of Displaced (2021) Rural Development Survey of municipalities, in IMPACT Open Data website; Labour Force and Household Living Conditions Survey 2018-2019 (CAS & ILO, 2019).

HOUSING

Monthly rent for residential dwelling (Syrian) 2021	LBP **409,930** [Zahleh District]
Ownership of primary residence by one of household members [governorate level]	**78.5%** **Bekaa**
Average residential sales value per sq m (units <=5 years old) 2019 [boundaries of place names not specified]	USD **918** [Zahleh District]

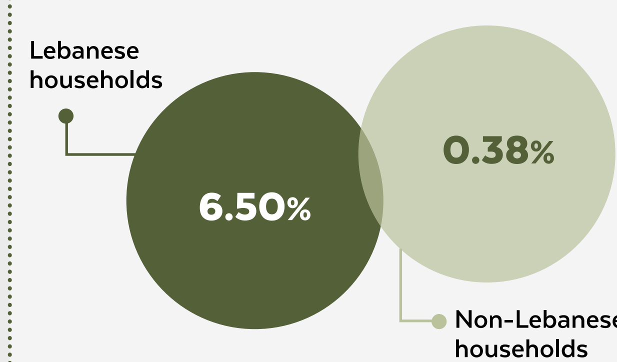
Sources (in order): Vulnerability Assessment of Syrian Refugees 2021 (reference date Jun-Jul 2021) (Inter-Agency Coordination Lebanon et al, 2021); Labour Force and Household Living Conditions Survey 2018-2019 (CAS & ILO, 2019) REAL Price Index Survey (Real Estate Syndicate of Lebanon, 2019).

IN THE PROFILED DISADVANTAGED NEIGHBOURHOOD

18.30%

'Buildings in need of major structural repair/emergency intervention (%)' based on neighbourhood profile(s) of most disadvantaged areas

PROPORTION OF OVERCROWDING



WATER

Bekaa WE — **Regional Water Establishment** (RWE)

18% — **Water bill collection rate by regional water establishment** (RWE)

62% — **Drinking water supply network connection rate by regional water establishment**

76.7% [Bekaa] — **Distribution of primary residences** according to availability of services or means & governorates: public water (2018)

Sources (in order): UN-Habitat, 2015; Fanack after MEW, 2010, updated based on personal communication with MEW, 2015; Labour Force and Household Living Conditions Survey (CAS & ILO, 2019).

IN PROFILED DISADVANTAGED NEIGHBOURHOODS

99% — **Use of improved drinking water sources** (by number of residents)

1.4% — **Streets (by area) with no domestic water supply**

2.4% — **Buildings not connected to the domestic water network**

WASTEWATER

66.3% [Bekaa] — **Primary residences according to type of sanitation means: Public sewage system**

22.9% [Bekaa] — **Primary residences according to type of sanitation means (septic tank)**

Source: Labour Force and Household Living Conditions Survey 2018-2019 (CAS & ILO, 2019).

IN PROFILED DISADVANTAGED NEIGHBOURHOODS

98.1% — **Use of improved sanitation (by number of residents)**

1.6% — **Streets (by area) with malfunctional wastewater network**

1.7% — **Buildings with blocked or no connection to the wastewater network**

SOLID WASTE

YES ✓ — **Public sector-led solid waste secondary sorting operational**

1 — **Municipalities self-reporting existence of waste sorting and recycling**

Sources (in order): UN-Habitat (2021) Desk review; Lebanon Central Inspection & Ministry of Displaced (2021).

ELECTRICITY

99.9% [Zahleh Governorate] — **Percentage distribution of primary residences according to availability of services: Electricity**

YES ✓ Zahle Maalaqa Municipality - ‹Other› — **Existence of alternative energy as reported by local authorities, by type**

Sources (in order): Labour Force and Household Living Conditions Survey (CAS & ILO, 2019); Central Inspection Initiative IMPACT Open Data website: Rural development survey of municipalities in Lebanon (Sep 2021).

IN PROFILED DISADVANTAGED NEIGHBOURHOODS

12.6% — **Buildings connected with critical defects to the public electrical grid**

4.9% — **Streets (by street area) with no street lighting**

HEALTHH

COVID:
- **1.0%** of national population
- **1.5%** of COVID cases nationally

HEALTH CARE CENTRES:
- **7** Primary
- **4** Secondary

Sources (in order): Central Inspection Initiative IMPACT Open Data website: Rural development survey of municipalities in Lebanon (data gathered Sep 2020; publication Sep 2021); UN-Habitat & UNICEF Neighbourhood Profiles Geoportal, viewed 2021.

IN PROFILED DISADVANTAGED NEIGHBOURHOODS

100%
Care seeking for diarrhoea

CHRONICALLY ILL

- of Lebanese **8.2%**
- of Non-Lebanese **6.5%**

HEALTH INSURANCE COVERAGE

- of Lebanese households **40.7%**
- of Non-Lebanese households **3.3%**

EDUCATION

SCHOOLS:
- **14** Public schools
- **0** UNRWA schools

15%
School dropouts among Lebanese children within the municipality, i.e. % youth 4-16 years old outside school system, as reported by the local authority. Range of percents among municipalities comprising each city.

Sources (in order): Central Inspection Initiative IMPACT Open Data website: Rural development survey of municipalities in Lebanon (Sep 2021) as reported by MoPH and reviewed by local authority.

IN PROFILED DISADVANTAGED NEIGHBOURHOODS

72.6% — **Primary school attendance among children (6-11)**

57.1% — **Secondary school attendance among children (12-17)**

URBAN MOBILITY

49% — **Proportion of the population that has convenient access to public transport**

Source: UN-Habitat Urban Indicators Database (2020).

PUBLIC SPACE

56.8% — **Unbuilt land cover within city perimeter 2021**

77.9 m² per person — **Unbuilt land cover per person 2021**

No data — **Population within 400m walking distance to an open public space**

Sources (in order): Unbuilt area: Global built-up grid for reference year 2018 (10m resolution). GHS stands for Global Human Settlements; S2 refers to the Sentinel2- satellite. Population: Population Package (Inter-Agency Coordination Lebanon (2020) in Lebanon Crisis Response Plan (Government of Lebanon & UN, 2021)). City boundaries (UN-Habitat, 2021); City boundaries 2021: for reference year 2018 cross-referenced and updated to 2021 using Google Earth imagery 2021, viewed 2021.

IN PROFILED DISADVANTAGED NEIGHBOURHOODS

19.9% — **Neighbourhood area comprising open spaces**

37.0% — **Open spaces (by area) that are publicly used**

61.9% — **Open spaces (by area) that are privately used**

PROTECTION

IN PROFILED DISADVANTAGED NEIGHBOURHOODS

2.6% — **Lebanese children (5-17) involved in economic activities**

4% — **Non-Lebanese children (5-17) involved in economic activities**

15.6% — **Young women aged 15-19 who are currently married**

20% — **Lebanese children (5-17) involved in economic activities who are exposed to any hazardous work condition**

28.6% — **Non-Lebanese children (5-17) involved in economic activities who are exposed to any hazardous work condition**

SAFETY & SECURITY

8.2% [Bekaa Governorate] — **Source of tensions: Competition for services and utilities**

Source: Regular Perceptions Survey of Social Tensions Throughout Lebanon, Wave XI (UNDP & ARK, August 2021).

IN PROFILED DISADVANTAGED NEIGHBOURHOODS

0.2% — **Of Lebanese households that have faced disputes in the area**

1.4% — **Of non-Lebanese households that have faced disputes in the area**

CULTURAL HERITAGE

NO ✕ — **CHUD-designated city**

UNESCO designation — **UNESCO Creative Cities Network member designation (2013)**

Zahleh Maalaqa — **Municipalities in city self-reporting existence of initiatives and projects in past five years to improve tourism sector**

Sources (in order): Desk review (UN-Habitat, 2021); UNESCO website, viewed Aug 2021; Lebanon Central Inspection & Ministry of Displaced (2021) Rural Development Survey, in Impact Open Data website.

For a summary of all data compared across the ten selected cities, see UN-Habitat & ESCWA (2021) The State of Lebanese Cities Report 2021.

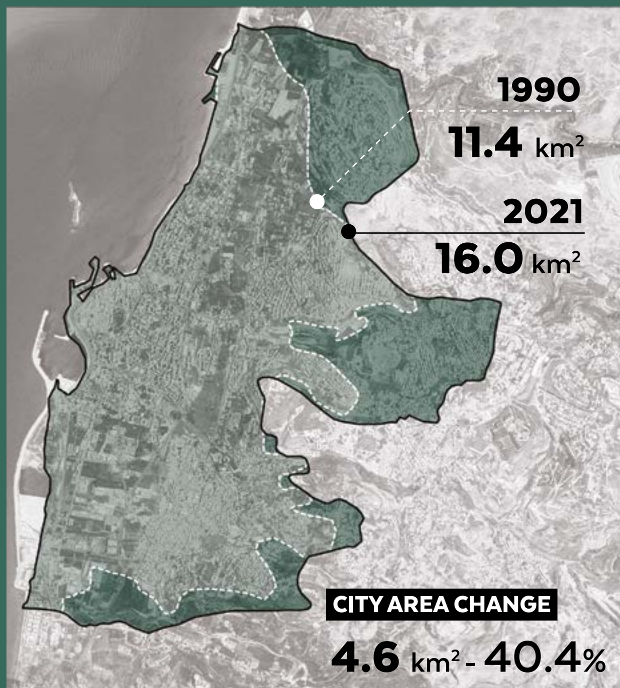
ESCWA — Shared Prosperity Dignified Life — UN-HABITAT FOR A BETTER URBAN FUTURE

SAIDA CITY

City dashboards present city-specific multisectoral data relevant to sustainable urban development. They aim to support city decision-makers and stakeholders in designing and monitoring holistic area-based approaches to improving urban wellbeing and resilience within cities. They enable comparison and mutual learning between cities, and highlight the diversity of unique city contexts that make up urban Lebanon.

City boundaries are defined on a working basis according to their continuously built up areas. City population figures are aggregated up from the cadaster-level population dataset agreed between the Government of Lebanon and UN for planning purposes in the Lebanon Crisis Response Plan.

CITY AREA & EXPANSION

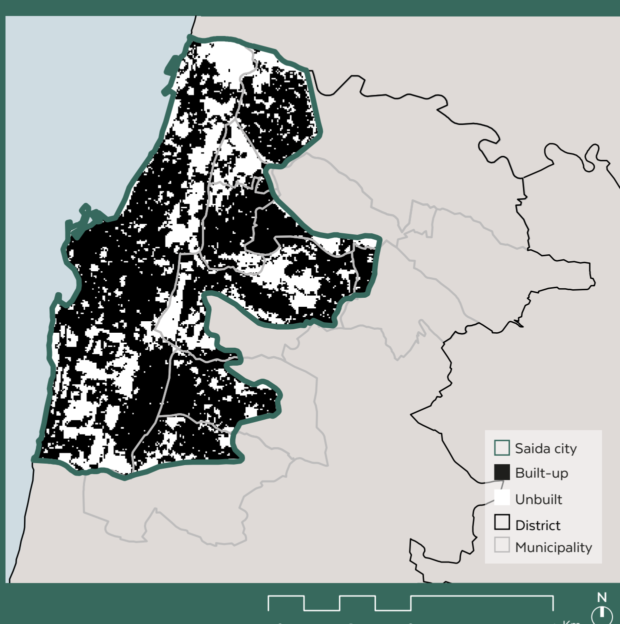


Source: UN-Habitat Lebanon, 2021.

LAND COVER WITHIN CITY PERIMETER 2018

BUILT-UP **10.4** km² (65.1%)

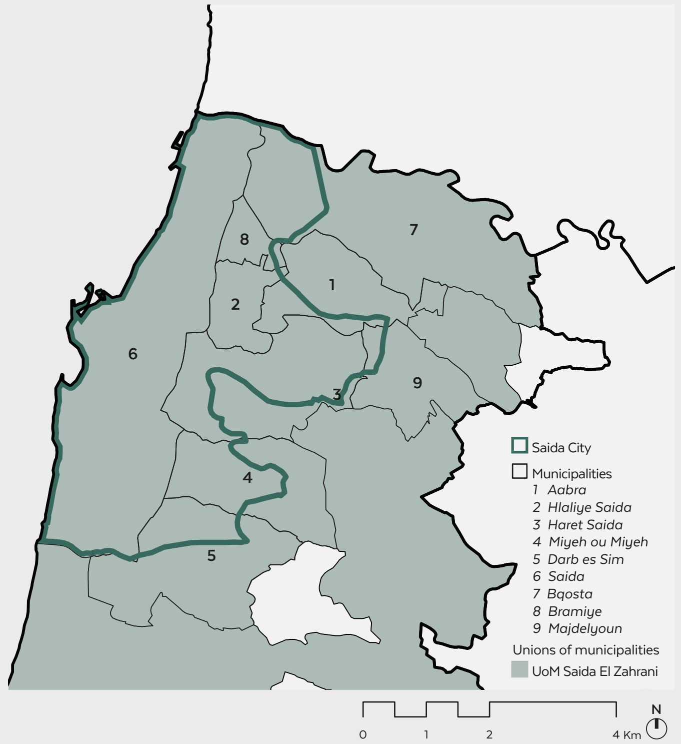
UNBUILT **5.6** km² (34.9%)



Source: Global Human Settlements Layer Dataset: Global built-up grid 2018. City boundaries 2021: for reference year 2018 cross-referenced and updated to 2021 using Google Earth imagery 2021, viewed 2021.

ADMINISTRATIVE CONTEXT

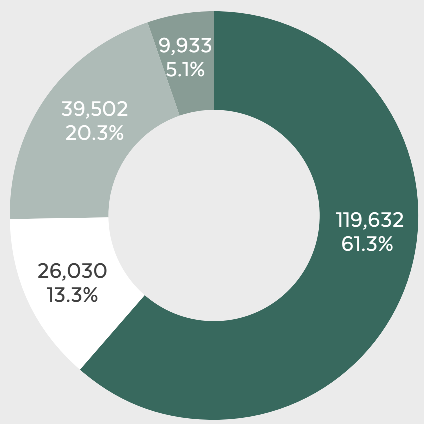
Governorate: South | **District:** Saida



POPULATION

195,095
INHABITANTS

3.5%
OF NATIONAL POPULATION



POPULATION DENSITY

12,220 Persons per km² of city area (built-up & unbuilt land)

18,770 Persons per km² of city area (built-up land only)

Sources (in order): Population Package (Inter-Agency Coordination Lebanon (2020) in Lebanon Crisis Response Plan (Government of Lebanon & UN, 2021)). City boundaries (UN-Habitat, 2021).

GOVERNING SUSTAINABLE URBAN DEVELOPMENT

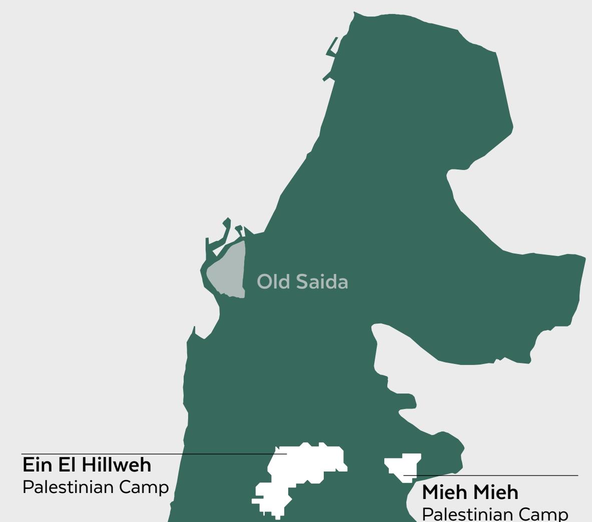
Multi-municipality sustainable development strategy in place: Saida Urban Sustainable Development Strategy, but limited to Saida Municipality.

Draft by UN-Habitat (unpublished)	**Multi-sectoral city profile related to sustainable urban development exists**
1 Old Saida	**Multi-sectoral neighbourhood profiles related to sustainable urban development exist**
0	**Municipal elected mayors who are female**

Sources (in order): UN-Habitat, 2016, 2017; UN-Habitat and UNICEF 2017-2020; Ministry of Interior and Municipalities website, viewed Sep 2021.

POVERTY

6 out of 9	**City cadastres among the 251 most vulnerable in Lebanon**
5 areas	**City cadastres identified as -** or containing one or more areas identified as **- among the 498 most disadvantaged areas in Lebanon**
2 Ein El-Hilweh; Mieh Mieh	**UNRWA-managed Palestinian Camps** (12 nationally)



Disadvantaged neighbourhoods profiled by UN-Habitat and UNICEF 2017-2020. Read profiles at lebanonportal.unhabitat.org.

19.1% [Saida District]	**"Poor or very poor" in self-classification of wealth status survey**

Sources (in order): Inter-agency Coordination Lebanon, 2015; UN-Habitat & UNICEF, 2018; UNRWA website, viewed 2021; Labour Force and Household Living Conditions Survey (CAS & ILO, 2019).

ECONOMY & LIVELIHOODS

48.8% [Saida district]	**Labour force unemployment rate**
30%/71% [Saida district]	**Labour force participation rate - Women / Men**

Sources (in order): Lebanon Central Inspection & Ministry of Displaced (2021) Rural Development Survey of municipalities, in IMPACT Open Data website; Labour Force and Household Living Conditions Survey 2018-2019 (CAS & ILO, 2019).

HOUSING

Monthly rent for residential dwelling (Syrian) 2021	LBP **372,866** [Saida district]
Ownership of primary residence by one of household members [governorate level]	**72.2%** **South**
Average residential sales value per sq m (units <=5 years old) 2019 [boundaries of place names not specified]	No data

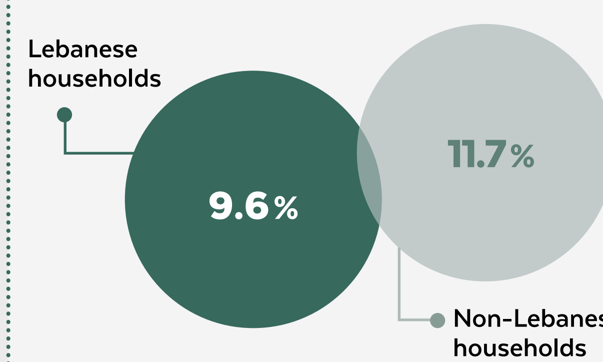
Sources (in order): Vulnerability Assessment of Syrian Refugees 2021 (reference date Jun-Jul 2021) (Inter-Agency Coordination Lebanon et al, 2021); Labour Force and Household Living Conditions Survey 2018-2019 (CAS & ILO, 2019) REAL Price Index Survey (Real Estate Syndicate of Lebanon, 2019).

IN THE PROFILED DISADVANTAGED NEIGHBOURHOOD

30.9%

'Buildings in need of major structural repair/emergency intervention (%)' based on neighbourhood profile(s) of most disadvantaged areas

PROPORTION OF OVERCROWDING



WATER

South WE — **Regional Water Establishment** (RWE)

52% — **Water bill collection rate by regional water establishment** (RWE)

87% — **Drinking water supply network connection rate by regional water establishment**

89.7% [South Governorate] — **Distribution of primary residences** according to availability of services or means & governorates: public water (2018)

Sources (in order): UN-Habitat, 2015; Fanack after MEW, 2010, updated based on personal communication with MEW, 2015; Labour Force and Household Living Conditions Survey (CAS & ILO, 2019).

IN THE PROFILED DISADVANTAGED NEIGHBOURHOOD

99.3% — **Use of improved drinking water sources** (by number of residents)

35.2% — **Streets (by area) with no domestic water supply**

5.2% — **Buildings not connected to the domestic water network**

WASTEWATER

69.5% [South Governorate] — **Primary residences according to type of sanitation means: Public sewage system**

29.2% [South Governorate] — **Primary residences according to type of sanitation means (septic tank)**

Source: Labour Force and Household Living Conditions Survey 2018-2019 (CAS & ILO, 2019).

IN THE PROFILED DISADVANTAGED NEIGHBOURHOOD

95.8% — **Use of improved sanitation (by number of residents)**

13.9% — **Streets (by area) with malfunctional wastewater network**

3.9% — **Buildings with blocked or no connection to the wastewater network**

SOLID WASTE

NO ✕ — **Public sector-led solid waste secondary sorting operational**

7 — **Municipalities self-reporting existence of waste sorting and recycling**

Sources (in order): UN-Habitat (2021) Desk review; Lebanon Central Inspection & Ministry of Displaced (2021).

ELECTRICITY

99.4% [South Governorate] — **Percentage distribution of primary residences according to availability of services: Electricity**

YES ✓ Saida Municipality - Solar — **Existence of alternative energy as reported by local authorities, by type**

Sources (in order): Labour Force and Household Living Conditions Survey (CAS & ILO, 2019); Central Inspection Initiative IMPACT Open Data website: Rural development survey of municipalities in Lebanon (Sep 2021).

IN THE PROFILED DISADVANTAGED NEIGHBOURHOOD

29.4% — **Buildings connected with critical defects to the public electrical grid**

36.6% — **Streets (by street area) with no street lighting**

HEALTH

COVID
- **1.8%** of national population
- **3.5%** of COVID cases nationally

HEALTH CARE CENTRES
- **37** Primary
- **12** Secondary

Sources (in order): Central Inspection Initiative IMPACT Open Data website: Rural development survey of municipalities in Lebanon (data gathered Sep 2020; publication Sep 2021); UN-Habitat & UNICEF Neighbourhood Profiles Geoportal, viewed 2021.

IN THE PROFILED DISADVANTAGED NEIGHBOURHOOD

57.1% **Care seeking for diarrhoea**

CHRONICALLY ILL
- of Lebanese **13%**
- of Non-Lebanese **13.7%**

HEALTH INSURANCE COVERAGE
- of Lebanese households **27.5%**
- of Non-Lebanese households **5.2%**

EDUCATION

SCHOOLS
- **20** Public schools
- **18** UNRWA schools

2% - 50% — **School dropouts among Lebanese children within the municipality,** i.e. % youth 4-16 years old outside school system, as reported by the local authority. Range of percents among municipalities comprising each city.

Sources (in order): Central Inspection Initiative IMPACT Open Data website: Rural development survey of municipalities in Lebanon (Sep 2021) as reported by MoPH and reviewed by local authority.

IN THE PROFILED DISADVANTAGED NEIGHBOURHOOD

89.9% — **Primary school attendance among children (6-11)**

60.1% — **Secondary school attendance among children (12-17)**

URBAN MOBILITY

24.4% — **Proportion of the population that has convenient access to public transport**

Source: UN-Habitat Urban Indicators Database (2020).

PUBLIC SPACE

34.9% — **Unbuilt land cover within city perimeter 2021**

28.6 m² per person — **Unbuilt land cover per person 2021**

No data — **Population within 400m walking distance to an open public space**

Sources (in order): Unbuilt area: Global built-up grid for reference year 2018 (10m resolution). GHS stands for Global Human Settlements; S2 refers to the Sentinel2- satellite. Population: Population Package (Inter-Agency Coordination Lebanon (2020) in Lebanon Crisis Response Plan (Government of Lebanon & UN, 2021)). City boundaries (UN-Habitat, 2021); City boundaries 2021: for reference year 2018 cross-referenced and updated to 2021 using Google Earth imagery 2021, viewed 2021.

IN THE PROFILED DISADVANTAGED NEIGHBOURHOOD

28.9% — **Neighbourhood area comprising open spaces**

16.6% — **Open spaces (by area) that are publicly used**

83.4% — **Open spaces (by area) that are privately used**

PROTECTION

IN THE PROFILED DISADVANTAGED NEIGHBOURHOOD

8.1% — **Lebanese children (5-17) involved in economic activities**

15.5% — **Non-Lebanese children (5-17) involved in economic activities**

18.6% — **Young women aged 15-19 who are currently married**

82.1% — **Lebanese children (5-17) involved in economic activities who are exposed to any hazardous work condition**

65.6% — **Non-Lebanese children (5-17) involved in economic activities who are exposed to any hazardous work condition**

SAFETY & SECURITY

24.5% [South Governorate] — **Source of tensions: Competition for services and utilities**

Source: Regular Perceptions Survey of Social Tensions Throughout Lebanon, Wave XI (UNDP & ARK, August 2021).

IN THE PROFILED DISADVANTAGED NEIGHBOURHOOD

2.9% — **Of Lebanese households that have faced disputes in the area**

2.5% — **Of non-Lebanese households that have faced disputes in the area**

CULTURAL HERITAGE

YES ✓ — **CHUD-designated city**

UNESCO designation — **On UNESCO tentative list (2019)**

Haret Saida Saida — **Municipalities in city self-reporting existence of initiatives and projects in past five years to improve tourism sector**

Sources (in order): Desk review (UN-Habitat, 2021); UNESCO website, viewed Aug 2021; Lebanon Central Inspection & Ministry of Displaced (2021) Rural Development Survey, in Impact Open Data website.

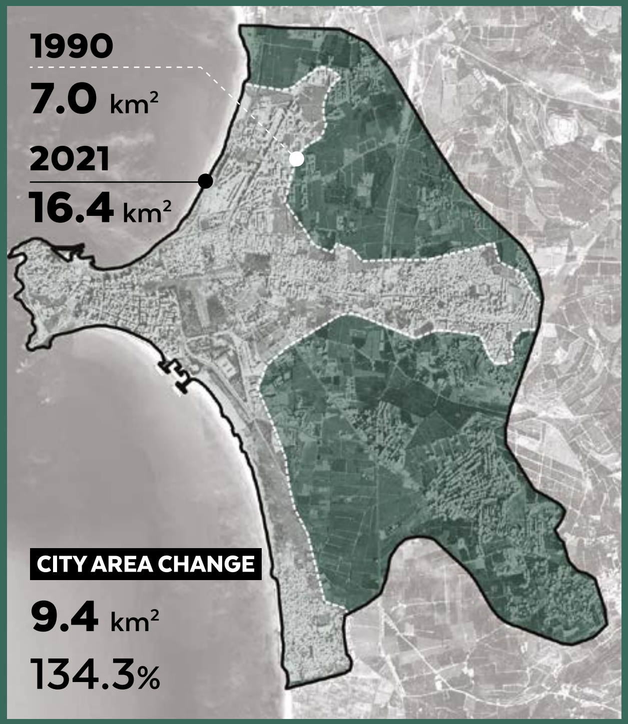
For a summary of all data compared across the ten selected cities, see UN-Habitat & ESCWA (2021) The State of Lebanese Cities Report 2021.

TYRE CITY

City dashboards present city-specific multisectoral data relevant to sustainable urban development. They aim to support city decision-makers and stakeholders in designing and monitoring holistic area-based approaches to improving urban wellbeing and resilience within cities. They enable comparison and mutual learning between cities, and highlight the diversity of unique city contexts that make up urban Lebanon.

City boundaries are defined on a working basis according to their continuously built up areas. City population figures are aggregated up from the cadaster-level population dataset agreed between the Government of Lebanon and UN for planning purposes in the Lebanon Crisis Response Plan.

CITY AREA & EXPANSION

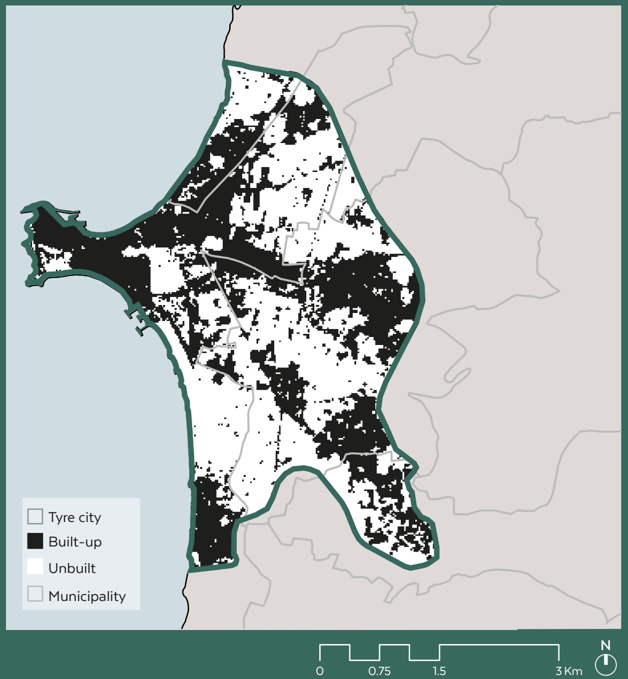


Source: UN-Habitat Lebanon, 2021.

LAND COVER WITHIN CITY PERIMETER 2018

BUILT-UP 7.2 km² (44.1%)

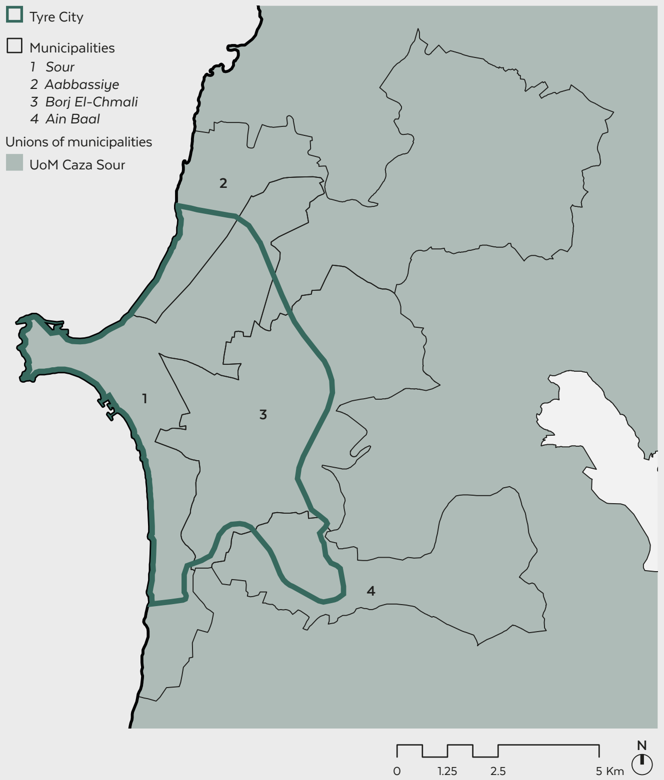
UNBUILT 9.2 km² (55.9%)



Source: Global Human Settlements Layer Dataset: Global built-up grid 2018. City boundaries 2021: for reference year 2018 cross-referenced and updated to 2021 using Google Earth imagery 2021, viewed 2021.

ADMINISTRATIVE CONTEXT

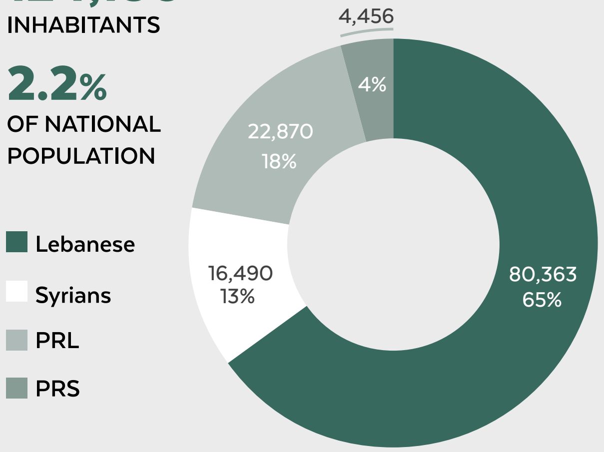
Governorate: South | **District:** Tyre



POPULATION

124,180
INHABITANTS

2.2%
OF NATIONAL POPULATION



POPULATION DENSITY

7,571	**Persons per km² of city area (built-up & unbuilt land)**
17,183	**Persons per km² of city area (built-up land only)**

Sources (in order): Population Package (Inter-Agency Coordination Lebanon (2020) in Lebanon Crisis Response Plan (Government of Lebanon & UN, 2021)). City boundaries (UN-Habitat, 2021).

GOVERNING SUSTAINABLE URBAN DEVELOPMENT

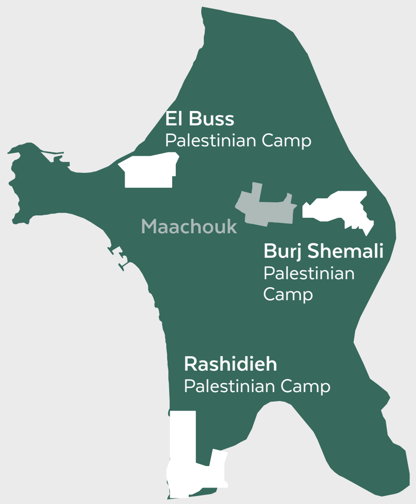
Multi-municipality sustainable development strategy in place: Strategic Sustainable Regional Development Plan [SSRDP] for the Caza of Tyre (2015 ongoing)

YES ✓	**Multi-sectoral city profile related to sustainable urban development exists**
1 Maachouk	**Multi-sectoral neighbourhood profiles related to sustainable urban development exist**
0	**Municipal elected mayors who are female**

Sources (in order): UN-Habitat, 2016, 2017; UN-Habitat and UNICEF 2017-2020; Ministry of Interior and Municipalities website, viewed Sep 2021.

POVERTY

4 out of 4	**City cadastres among the 251 most vulnerable in Lebanon**
10 areas	**City cadastres identified as - or** containing one or more areas identified as **- among the 498 most disadvantaged areas in Lebanon**
3 Burj Shemali, Rashidieh, El-Buss	**UNRWA-managed Palestinian Camps** (12 nationally)



Disadvantaged neighbourhoods profiled by UN-Habitat and UNICEF 2017-2020. Read profiles at lebanonportal.unhabitat.org.

30.3% [Tyre District] — **"Poor or very poor" in self-classification of wealth status survey**

Sources (in order): Inter-agency Coordination Lebanon, 2015; UN-Habitat & UNICEF, 2018; UNRWA website, viewed 2021; Labour Force and Household Living Conditions Survey (CAS & ILO, 2019).

ECONOMY & LIVELIHOODS

10% [Tyre District]	**Labour force unemployment rate**
19.6%/67.7% [Tyre District]	**Labour force participation rate - Women / Men**

Sources (in order): Lebanon Central Inspection & Ministry of Displaced (2021) Rural Development Survey of municipalities, in IMPACT Open Data website; Labour Force and Household Living Conditions Survey 2018-2019 (CAS & ILO, 2019).

HOUSING

Monthly rent for residential dwelling (Syrian) 2021	LBP **374,746** [Tyre District]
Ownership of primary residence by one of household members [governorate level]	**72.2%** **South**
Average residential sales value per sq m (units <=5 years old) 2019 [boundaries of place names not specified]	No data

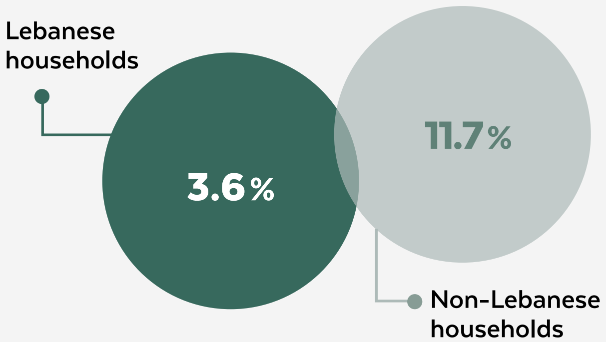
Sources (in order): Vulnerability Assessment of Syrian Refugees 2021 (reference date Jun-Jul 2021) (Inter-Agency Coordination Lebanon et al, 2021); Labour Force and Household Living Conditions Survey 2018-2019 (CAS & ILO, 2019) REAL Price Index Survey (Real Estate Syndicate of Lebanon, 2019).

IN THE PROFILED DISADVANTAGED NEIGHBOURHOOD

25.3%

'Buildings in need of major structural repair/emergency intervention (%)' based on neighbourhood profile(s) of most disadvantaged areas

PROPORTION OF OVERCROWDING



WATER

South WE — **Regional Water Establishment** (RWE)

52% — **Water bill collection rate by regional water establishment** (RWE)

87% — **Drinking water supply network connection rate by regional water establishment**

89.7% [South Governorate] — **Distribution of primary residences** according to availability of services or means & governorates: public water (2018)

Sources (in order): UN-Habitat, 2015; Fanack after MEW, 2010, updated based on personal communication with MEW, 2015; Labour Force and Household Living Conditions Survey (CAS & ILO, 2019).

IN THE PROFILED DISADVANTAGED NEIGHBOURHOOD

95.7% — **Use of improved drinking water sources** (by number of residents)

0% — **Streets (by area) with no domestic water supply**

3.7% — **Buildings not connected to the domestic water network**

WASTEWATER

69.5% [South Governorate] — **Primary residences according to type of sanitation means: Public sewage system**

29.2% [South Governorate] — **Primary residences according to type of sanitation means (septic tank)**

Source: Labour Force and Household Living Conditions Survey 2018-2019 (CAS & ILO, 2019).

IN THE PROFILED DISADVANTAGED NEIGHBOURHOOD

97% — **Use of improved sanitation (by number of residents)**

34.2% — **Streets (by area) with malfunctional wastewater network**

5.5% — **Buildings with blocked or no connection to the wastewater network**

SOLID WASTE

YES ✓ — **Public sector-led solid waste secondary sorting operational**

No data — **Municipalities self-reporting existence of waste sorting and recycling**

Sources (in order): UN-Habitat (2021) Desk review; Lebanon Central Inspection & Ministry of Displaced (2021).

ELECTRICITY

99.4% [South Governorate] — **Percentage distribution of primary residences according to availability of services: Elecricity**

NO ✕ — **Existence of alternative energy as reported by local authorities, by type**

Sources (in order): Labour Force and Household Living Conditions Survey (CAS & ILO, 2019); Central Inspection Initiative IMPACT Open Data website: Rural development survey of municipalities in Lebanon (Sep 2021).

IN THE PROFILED DISADVANTAGED NEIGHBOURHOOD

40.2% — **Buildings connected with critical defects to the public electrical grid**

29.8% — **Streets (by street area) with no street lighting**

HEALTH

COVID
- **2%** of national population
- **2.2%** of COVID cases nationally

HEALTH CARE CENTRES
- **12** Primary
- **3** Secondary

Sources (in order): Central Inspection Initiative IMPACT Open Data website: Rural development survey of municipalities in Lebanon (data gathered Sep 2020; publication Sep 2021); UN-Habitat & UNICEF Neighbourhood Profiles Geoportal, viewed 2021.

IN THE PROFILED DISADVANTAGED NEIGHBOURHOOD

90.2% **Care seeking for diarrhoea**

CHRONICALLY ILL
- of Lebanese **8.3%**
- of Non-Lebanese **9.8%**

HEALTH INSURANCE COVERAGE
- of Lebanese households **27.4%**
- of Non-Lebanese households **25.4%**

EDUCATION

SCHOOLS
- **7** Public schools
- **11** UNRWA schools

5.5% - 5.5%
School dropouts among Lebanese children within the municipality, i.e. % youth 4-16 years old outside school system, as reported by the local authority. Range of percents among municipalities comprising each city.

Sources (in order): Central Inspection Initiative IMPACT Open Data website: Rural development survey of municipalities in Lebanon (Sep 2021) as reported by MoPH and reviewed by local authority.

IN THE PROFILED DISADVANTAGED NEIGHBOURHOOD

83.5% — **Primary school attendance among children (6-11)**

63.7% — **Secondary school attendance among children (12-17)**

URBAN MOBILITY

10.6% — **Proportion of the population that has convenient access to public transport**

Source: UN-Habitat Urban Indicators Database (2020).

PUBLIC SPACE

55.9% — **Unbuilt land cover within city perimeter 2021**

73.9 m² per person — **Unbuilt land cover per person 2021**

No data — **Population within 400m walking distance to an open public space**

Sources (in order): Unbuilt area: Global built-up grid for reference year 2018 (10m resolution). GHS stands for Global Human Settlements; S2 refers to the Sentinel2- satellite. Population: Population Package (Inter-Agency Coordination Lebanon (2020) in Lebanon Crisis Response Plan (Government of Lebanon & UN, 2021)). City boundaries (UN-Habitat, 2021); City boundaries 2021: for reference year 2018 cross-referenced and updated to 2021 using Google Earth imagery 2021, viewed 2021.

IN THE PROFILED DISADVANTAGED NEIGHBOURHOOD

33.8% — **Neighbourhood area comprising open spaces**

21% — **Open spaces (by area) that are publicly used**

79% — **Open spaces (by area) that are privately used**

PROTECTION

IN THE PROFILED DISADVANTAGED NEIGHBOURHOOD

4.1% — **Lebanese children (5-17) involved in economic activities**

6% — **Non-Lebanese children (5-17) involved in economic activities**

14% — **Young women aged 15-19 who are currently married**

54.6% — **Lebanese children (5-17) involved in economic activities who are exposed to any hazardous work condition**

80% — **Non-Lebanese children (5-17) involved in economic activities who are exposed to any hazardous work condition**

SAFETY & SECURITY

24.5% [South Governorate] — **Source of tensions: Competition for services and utilities**

Source: Regular Perceptions Survey of Social Tensions Throughout Lebanon, Wave XI (UNDP & ARK, August 2021).

IN THE PROFILED DISADVANTAGED NEIGHBOURHOOD

0.6% — **Of Lebanese households that have faced disputes in the area**

1.2% — **Of non-Lebanese households that have faced disputes in the area**

CULTURAL HERITAGE

YES ✓ — **CHUD-designated city**

UNESCO designation — **UNESCO World Heritage Site - Cultural type designation (1984)**

Aabbassiye Sour — **Municipalities in city self-reporting existence of initiatives and projects in past five years to improve tourism sector**

Sources (in order): Desk review (UN-Habitat, 2021); UNESCO website, viewed Aug 2021; Lebanon Central Inspection & Ministry of Displaced (2021) Rural Development Survey, in Impact Open Data website.

For a summary of all data compared across the ten selected cities, see UN-Habitat & ESCWA (2021) The State of Lebanese Cities Report 2021.

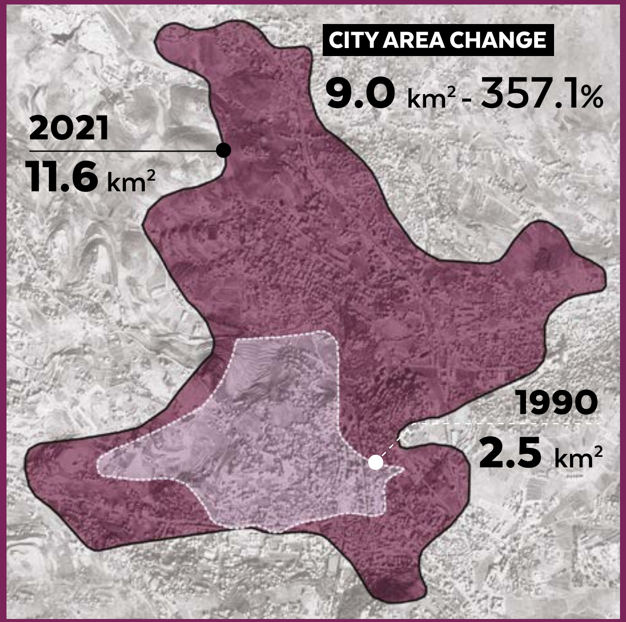
ESCWA
Shared Prosperity Dignified Life
UN-HABITAT FOR A BETTER URBAN FUTURE

NABATIYEH CITY

City dashboards present city-specific multisectoral data relevant to sustainable urban development. They aim to support city decision-makers and stakeholders in designing and monitoring holistic area-based approaches to improving urban wellbeing and resilience within cities. They enable comparison and mutual learning between cities, and highlight the diversity of unique city contexts that make up urban Lebanon.

City boundaries are defined on a working basis according to their continuously built up areas. City population figures are aggregated up from the cadaster-level population dataset agreed between the Government of Lebanon and UN for planning purposes in the Lebanon Crisis Response Plan.

CITY AREA & EXPANSION

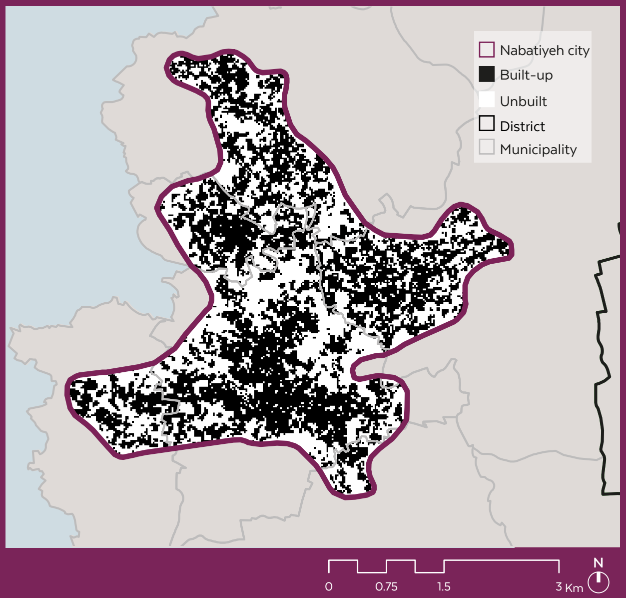


Source: UN-Habitat Lebanon, 2021.

LAND COVER WITHIN CITY PERIMETER 2018

BUILT-UP 5.75 km² (49.7%)

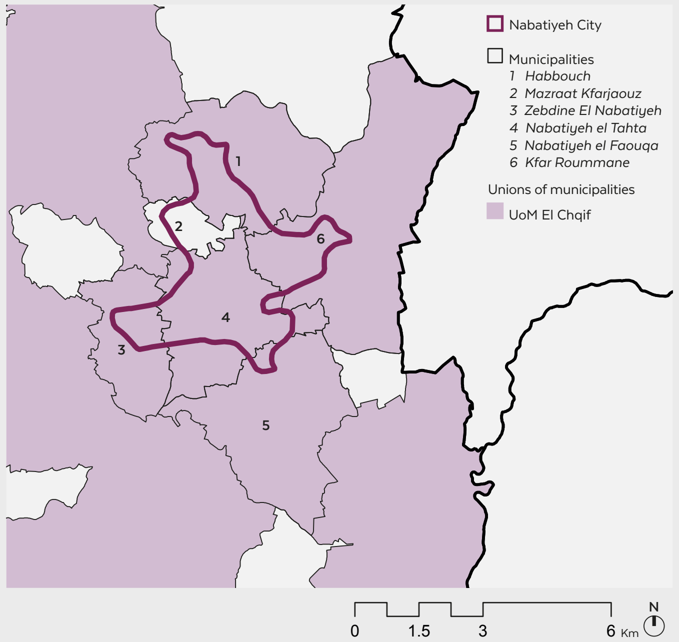
UNBUILT 5.82 km² (50.3%)



Source: Global Human Settlements Layer Dataset: Global built-up grid 2018. City boundaries 2021: for reference year 2018 cross-referenced and updated to 2021 using Google Earth imagery 2021, viewed 2021.

ADMINISTRATIVE CONTEXT

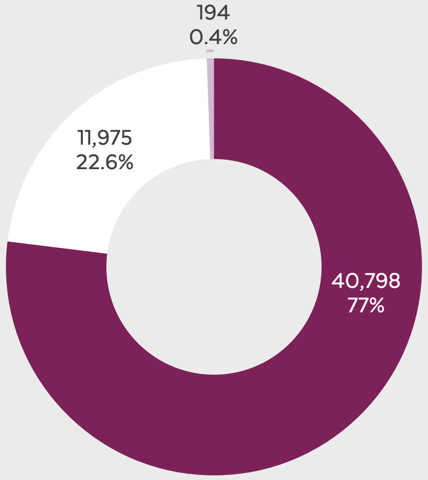
Governorate: Nabatiye | **District:** El Nabatiye



POPULATION

52,966
INHABITANTS

0.9%
OF NATIONAL POPULATION



POPULATION DENSITY

4,575 Persons per km² of city area (built-up & unbuilt land)

9,205 Persons per km² of city area (built-up land only)

Sources (in order): Population Package (Inter-Agency Coordination Lebanon (2020) in Lebanon Crisis Response Plan (Government of Lebanon & UN, 2021)). City boundaries (UN-Habitat, 2021).

GOVERNING SUSTAINABLE URBAN DEVELOPMENT

Multi-municipality sustainable development strategy in place: Strategy exists but not funded.

NO ✕	Multi-sectoral city profile related to sustainable urban development exists
NO ✕	Multi-sectoral neighbourhood profiles related to sustainable urban development exist
0	Municipal elected mayors who are female

Sources (in order): UN-Habitat, 2016, 2017; UN-Habitat and UNICEF 2017-2020; Ministry of Interior and Municipalities website, viewed Sep 2021.

POVERTY

5 out of 6 (except Mazraat Kfarjaouz)	City cadastres among the 251 most vulnerable in Lebanon
5 areas	City cadastres identified as - or containing one or more areas identified as - among the 498 most disadvantaged areas in Lebanon
0	UNRWA-managed Palestinian Camps (12 nationally)
28.2% [Nabatiyeh District]	"Poor or very poor" in self-classification of wealth status survey

Sources (in order): Inter-agency Coordination Lebanon, 2015; UN-Habitat & UNICEF, 2018; UNRWA website, viewed 2021; Labour Force and Household Living Conditions Survey (CAS & ILO, 2019).

ECONOMY & LIVELIHOODS

8.5% [Nabatiyeh district]	Labour force unemployment rate
20.7%/72.4% [Nabatiyeh district]	Labour force participation rate - Women / Men

Sources (in order): Lebanon Central Inspection & Ministry of Displaced (2021) Rural Development Survey of municipalities, in IMPACT Open Data website; Labour Force and Household Living Conditions Survey 2018-2019 (CAS & ILO, 2019).

HOUSING

Monthly rent for residential dwelling (Syrian) 2021	LBP **344,963** [Nabatiyeh district]
Ownership of primary residence by one of household members [governorate level]	**82.7%**
Average residential sales value per sq m (units <=5 years old) 2019 [boundaries of place names not specified]	USD **708** [Nabatiyeh district]

Sources (in order): Vulnerability Assessment of Syrian Refugees 2021 (reference date Jun-Jul 2021) (Inter-Agency Coordination Lebanon et al, 2021); Labour Force and Household Living Conditions Survey 2018-2019 (CAS & ILO, 2019) REAL Price Index Survey (Real Estate Syndicate of Lebanon, 2019).

WATER

South WE	**Regional Water Establishment** (RWE)
52%	**Water bill collection rate by regional water establishment** (RWE)
87%	**Drinking water supply network connection rate by regional water establishment**
91.1% [Nabatiyeh Governorate]	**Distribution of primary residences** according to availability of services or means & governorates: public water (2018)

Sources (in order): UN-Habitat, 2015; Fanack after MEW, 2010, updated based on personal communication with MEW, 2015; Labour Force and Household Living Conditions Survey (CAS & ILO, 2019).

WASTEWATER

35.5% [Nabatiyeh Governorate]	Primary residences according to type of sanitation means: Public sewage system
64.2% [Nabatiyeh Governorate]	Primary residences according to type of sanitation means (septic tank)

Source: Labour Force and Household Living Conditions Survey 2018-2019 (CAS & ILO, 2019).

SOLID WASTE

YES ✓ — **Public sector-led solid waste secondary sorting operational**

2 — **Municipalities self-reporting existence of waste sorting and recycling**

Sources (in order): UN-Habitat (2021) Desk review; Lebanon Central Inspection & Ministry of Displaced (2021).

ELECTRICITY

99.6% [Nabatiyeh Governorate] — **Percentage distribution of primary residences according to availability of services: Electricity**

NO ✕ — **Existence of alternative energy as reported by local authorities, by type**

Sources (in order): Labour Force and Household Living Conditions Survey (CAS & ILO, 2019); Central Inspection Initiative IMPACT Open Data website: Rural development survey of municipalities in Lebanon (Sep 2021).

HEALTH

COVID
- **0.2%** of national population
- **0.9%** of COVID cases nationally

HEALTH CARE CENTRES
- **11** Primary
- **5** Secondary

Sources (in order): Central Inspection Initiative IMPACT Open Data website: Rural development survey of municipalities in Lebanon (data gathered Sep 2020; publication Sep 2021); UN-Habitat & UNICEF Neighbourhood Profiles Geoportal, viewed 2021.

EDUCATION

SCHOOLS
- **13** Public schools
- **0** UNRWA schools

1%

School dropouts among Lebanese children within the municipality, i.e. % youth 4-16 years old outside school system, as reported by the local authority. Range of percents among municipalities comprising each city.

Sources (in order): Central Inspection Initiative IMPACT Open Data website: Rural development survey of municipalities in Lebanon (Sep 2021) as reported by MoPH and reviewed by local authority.

URBAN MOBILITY

No data — **Proportion of the population that has convenient access to public transport**

PUBLIC SPACE

50.3% — **Unbuilt land cover within city perimeter 2021**

109.9 m² per person — **Unbuilt land cover per person 2021**

No data — **Population within 400m walking distance to an open public space**

Sources (in order): Unbuilt area: Global built-up grid for reference year 2018 (10m resolution). GHS stands for Global Human Settlements; S2 refers to the Sentinel2- satellite. Population: Population Package (Inter-Agency Coordination Lebanon (2020) in Lebanon Crisis Response Plan (Government of Lebanon & UN, 2021)). City boundaries (UN-Habitat, 2021); City boundaries 2021: for reference year 2018 cross-referenced and updated to 2021 using Google Earth imagery 2021, viewed 2021.

SAFETY & SECURITY

24.5% [South Governorate] — **Source of tensions: Competition for services and utilties**

Source: Regular Perceptions Survey of Social Tensions Throughout Lebanon, Wave XI (UNDP & ARK, August 2021).

CULTURAL HERITAGE

NO ✕ — **CHUD-designated city**

NO ✕ — **UNESCO World Heritage Site - Cultural type designation (1984)**

NO ✕ — **Municipalities in city self-reporting existence of initiatives and projects in past five years to improve tourism sector**

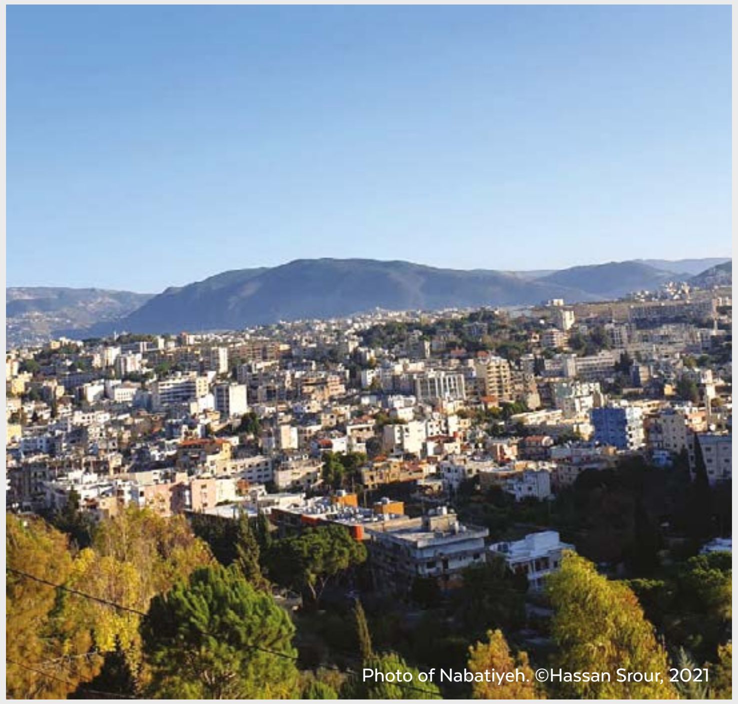
Sources (in order): Desk review (UN-Habitat, 2021); UNESCO website, viewed Aug 2021; Lebanon Central Inspection & Ministry of Displaced (2021) Rural Development Survey, in Impact Open Data website.

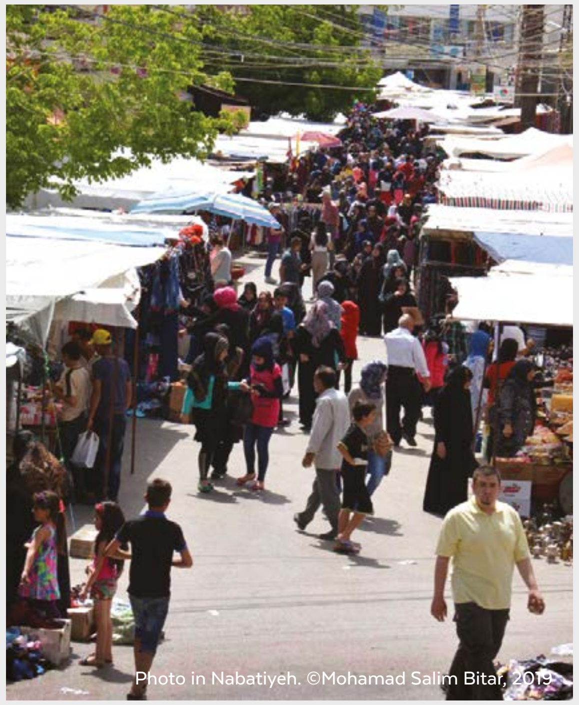

Photo in Nabatiyeh. ©Mohamad Salim Bitar, 2021


Photo in Nabatiyeh. ©Mohamad Salim Bitar, 2019


Photo in Nabatiyeh. ©Mohamad Salim Bitar, 2021


Photo in Nabatiyeh. ©Hassan Srour, 2021


Photo of Nabatiyeh. ©Hassan Srour, 2021


Photo in Nabatiyeh. ©Mohamad Salim Bitar, 2019

For a summary of all data compared across the ten selected cities, see UN-Habitat & ESCWA (2021) The State of Lebanese Cities Report 2021.

ESCWA Shared Prosperity Dignified Life
UN-HABITAT FOR A BETTER URBAN FUTURE


Photo of Tripoli. ©Ahmad Chinder, 2021

City dashboards summary data table for ten cities

Theme/ sector	Indicator	Tripoli	Beirut	Jounieh	Byblos	Baalbek	Hermel	Zahleh	Saida	Tyre	Nabatiyeh	10 Cities	Lebanon	Source
Administrative context	*Governorate*	North	Beirut, Mount Lebanon	Mount Lebanon	Mount Lebanon	Baalbek El-Hermel	Baalbek El-Hermel	Bekaa	South	South	Nabatiye	7	8	Inter-Agency Coordination Lebanon (2021) Lebanon Map Hub website
	District fully or partly in city	Miniyeh-Danniyeh, Tripoli, Zgharta	Beirut, Aaley, Baabda, Metn	Keserwan	Jbeil	Baalbek	Hermel	Zahleh	Saida	Sour	El Nabatiyeh	12	26	
	Number of cadastres fully or partly in city	18	55	5	5	3	1	15	11	4	6	123	1,643	
	Number of municipalities fully or partly in city	5	31	3	5	3	1	2	9	4	6	69	1,047	
	Names of municipalities	Wadi El-Nahle, El-Beddaoui, El-Mina, Tripoli, Zgharta	See table 8	Jounieh, Zouk Mosbeh, Zouq Mkayel	Blat, Bmehrayn, Jbeil, Mastita, Qartaboun	Aain Bourday, Al Anser Baalbek, Baalbek	Hermel	Zahleh Maalaqa, Ksara	Aabra, Bqosta, Bramiye, Darb Es-Sim, Haret Saida, Hlaliye Saida, Majdelyoun, Miyeh ou Miyeh, Saida	Aabbassiye, Aain Baal, Borj El-Chmali, Sour	Habbouch, Kfar Roummane. Mazraat Kfarjaouz, Nabatiye el Faouqa, Nabatiye el Tahta, Zebdine El Nabatieh	-	-	
	Number of unions fully or partly in city	2	3	1	1	1	1	1	1	1	1	12	54	
Area and built-up density	*City area 1990 sq km*	16.1	79.9	5.8	3.7	2.5	1.3	5.0	11.4	7.0	2.5	135.2	-	Google Earth (2021) analyzed by UN-Habitat (2021)
	City area 2021 sq km	24.54	110.6	10.8	8.0	20.5	4.7	11.6	16.0	16.4	11.6	234.6	-	
	City area change 1990-2021 sq km	8.5	30.7	5.0	4.2	18.0	3.4	6.6	4.6	9.4	9.0	99.4	-	
	City area change 1990-2021 %	52.6	38.4	87.5	114.5	717.0	249.7	132.5	40.4	134.3	357.1	73.5	-	
	Built-up land cover within city perimeter 2018 sq km	12.86	64.6	6.4	4.3	9.4	2.8	5.0	10.39	7.2	5.8	128.7	-	European Commission (2018) Joint Research Centre Data Catalogue: Global Human Settlement Layer 2018, analyzed jointly by UN-Habitat Regional Office of Arab States and UN-Habitat Lebanon (2021)
	Built-up land cover within city perimeter 2018 %	52.4	58.4	59.1	54.3	45.9	58.39	43.2	65.1	44.1	49.7	54.8	-	
	Unbuilt land cover within city perimeter 2018 sq km	11.7	46.0	4.4	3.6	11.1	2.0	6.6	5.6	9.2	5.8	105.9	-	
	Unbuilt land cover within city perimeter 2018 %	47.6	41.6	40.9	45.7	54.1	41.6	56.8	34.9	55.9	50.3	45.2	-	
Population	*Population All*	335,004	1,263,332	104,161	30,985	76,199	29,612	86,149	195,095	124,180	52,966	2,297,683	5,587,563	Inter-Agency Coordination Lebanon (2020) Population package 2020, used in Government of Lebanon and the United Nations (2021) Lebanon Crisis Response Plan. UN-Habitat (2021) City boundaries.
	Population as % of national population	6.0	22.6	1.9	0.6	1.4	0.5	1.5	3.5	2.2	0.9	41.1	100	
	Population Leb	227,741	975,897	97,811	28,486	47,363	22187	45,110	119,632	80,363	40,798	1,685,388	3,864,296	
	Population Leb % of All	68.0	77.2	93.9	91.9	62.16	74.9	52.4	61.3	64.7	77.0	73	69	
	Population Syr	86,875	256,433	6,350	2,500	25,925	7,425	41,040	26,030	16,490	11,975	481,043	1,500,000	

Table 5 City dashboards summary data table for ten cities. *Sources:* See table.

Theme/ sector	Indicator	Tripoli	Beirut	Jounieh	Byblos	Baalbek	Hermel	Zahleh	Saida	Tyre	Nabatiyeh	10 Cities	Lebanon	Source
Population	*Population Syr % of All*	25.9	20.3	6.1	8.1	34.02	25.1	47.6	13.3	13.3	22.6	20.9	26.8	Inter-Agency Coordination Lebanon (2020) Population package 2020, used in Government of Lebanon and the United Nations (2021) Lebanon Crisis Response Plan. UN-Habitat (2021) City boundaries.
	Population Palestinians in Lebanon	18,401	26,688	0	0	2,554	0	0	39,502	22,870	194	110,209	180,001	
	Population Palestinians in Lebanon % of All	5.5	2.1	-	-	3.35	-	-	20.2	18.4	0.4	4.8	3.2	
	Population Palestinians from Syria	1,980	4,311	0	0	356	0	0	9,933	4,456	0	21,036	43,266	
	Population Palestinians from Syria % of All	0.6	0.3	0	0	0.47	-	0	5	4	0.0	0.9	0.8	
	Population density: Persons per sq km of city area (built-up and unbuilt land)	13,653	11,423	9,635	3,891	3,722	6,286	7,439	12,220	7,571	4,575	9,793	-	
	Population density: Persons per sq km of city area (built-up land only)	26,048	19,568	16,307	7,161	8,105	10,766	17,204	18,770	17,183	9,205	17,857	-	
Poverty	*Number of city cadastres among the 251 most vulnerable localities in Lebanon*	12 of 18	23 out of 55	4 of 5 (only Jounie Haret Sakhr not included)	1 of 5 (Jbeil cadastre)	2 out of 3 (Douris, Baalbek in 1st quantile of 251)	1 out of 1 (Hermel in 1st quantile of 251)	4 of 16	6 of 9	4 of 4	5 of the 6 (only Mazraat Kfarjaouz not included)	62	251	Inter-agency Coordination Lebanond (2015) 251 most vulnerable localities In Lebanon.
	Number of city cadastres identified as - or containing one or more areas identified as - among the 498 most disadvantaged areas in Lebanon	6	19	5	0	7	1	1	5	10	5	59	498	UN-Habitat & UNICEF (2017) Neighbourhood profiling scope and methodology.
	% "Poor or very poor" in surveyed households' self-classification of wealth status [district level]	31.7 (Tripoli District); 48.6 (Minieh-Danniyeh District); 25 (Zgharta District)].	25.5 (Beirut District) 26.8 Baabda 20.4Metn 29.4 Aley	18.5 (Keserwan District)	12.7 (Jbeil District)	40.6 (Baalbek District)	47.1 (Hemel District)	37.3 (Zahleh District)	19.1 (Saida District)	30.3 (Tyre District)	28.2 (Nabatiyeh District)		26.3	Central Administration for Statistics and International Labour Organisation (2019) Lebanon Labour Force and Household Living Conditions Survey 2018-2019.
	Palestinian camps (official; UNRWA-managed serviced)	1 Beddawi	4 (Dbayeh, Shatileh, Bourj Brajneh, Mar Elias)	0	0	1 Wavel	0	0	2 (Ein El-Hilweh; Mieh Mieh)	3 (Burj Shemali, Rashidieh, El Buss)	0	11	12	UNRWA (2021) 'Where we work - Lebanon' (website page).

Table 5 (continued) City dashboards summary data table for ten cities. *Sources:* See Table.

Theme/ sector	Indicator	Tripoli	Beirut	Jounieh	Byblos	Baalbek	Hermel	Zahleh	Saida	Tyre	Nabatiyeh	10 Cities	Lebanon	Source
Governance of sustainable urban development	*Is there a multi-municipality sustainable development strategy in place?*	" - Al Fayhaa 2020 Sustainable Development Strategy 2020 (published 2011; 2014) - Danniye UoM: Two separate Strategic Plans (2012, 2013)"	No	"Not for city specifically. 'City vision' exists but no capacity / funding to implement."	A 'Resilient Byblos' Strategy exists (2015) but limited to Byblos Municipality.	No.	No. Old version requires updating; implementation challenges apply.	No. Comprehensive masterplan exists but not implemented.	Saida Urban Sustainable Development Strategy, but limited to Saida Municipality.	Strategic Sustainable Regional Development Plan'; for wider District of Tyre, not specifically the city (2015 ongoing).	Strategy exists but not funded.	-	-	UN-Habitat desk review (2021)
	Multi-sectoral profile of continuously built-up city related to sustainable urban development exists?	Yes (UN-Habitat, 2016, 2017).	Yes (UN-Habitat, 2021).	No	No	No	No	No	Draft by UN-Habitat (unpublished)	Yes (UN-Habitat, 2017).	No	3	3	
	Multi-sectoral neighbourhood profiles related to sustainable urban development exist?	4 (El-Qobbeh, Tabbaneh, Jabal Mohsen, Haddadine)	8 (Daouk-Ghawash , Hayy Tamlis, Sabra, Karm El-Zeytoun, Maraash, Hayy El-Jadid, Nabaa; Hamra)	1 (Hayy El-Kharoubeh)	No	3 (Shoaab, Mogher E-Taheen, El-Soleh Sahet El-Naser)	No	1 (Haoush El-Oumara)	1 (Old Saida)	1 (Maachouk)	No	19	29	UN-Habitat; UN-Habitat & UNICEF; UN-Habitat & RELIEF (variously 2017-2021)
	Number of municipal elected mayors who are female	1	0	0	0	0	0	0	0	0	0	1	1	Ministry of Interior and Municipalities (2021) Website http://www.interior.gov.lb/Dalil.aspx
Economy & Livelihoods	*Labour force unemployment rate % [district level]*	Tripoli 11.6 Zgharta 14.1 Minniey-Dannyeh 17.8	Beirut 11.6 Baabda 11.6 Metn 7.1 Aley 13	Keserwan 10.1	Jbeil 11.6	Baalbek 11.10	Hemel 10.20	Zahleh 14.4	Saida 48.8	Tyre 10	Nabatiyeh 8.5	-	11.4	Central Administration for Statistics and International Labour Organisation (2019) Lebanon Labour Force and Household Living Conditions Survey 2018-2019.
	Labour force participation rate %- Women / Men [district level]	Tripoli 24.9 / 74.2 Zgharta 26.8 / 68.1% Minniey-Dannyeh 22.% / 74.8%	Beirut 36.8 / 71.4% Baabda 32.3 / 73.8% Metn 41.6 / 70.9 Aley 27.6 / 77.5	Keserwan39.2 / 70.7	Jbeil 42.2 / 70.9	Baalbek 21.9 / 68.2	Hemel 18.2 / 62.21	Zahleh 21.3/ 72.8	Saida 30.0 / 71.0	Tyre 19.6 / 67.7	Nabatiyeh 20.7 / 72.4	-	29.3% / 70.4%	

Table 5 (continued) City dashboards summary data table for ten cities. *Sources:* See Table.

Theme/ sector	Indicator	Tripoli	Beirut	Jounieh	Byblos	Baalbek	Hermel	Zahleh	Saida	Tyre	Nabatiyeh	10 Cities	Lebanon	Source
Economy & Livelihoods	*Existence of industrial area self-reported by surveyed municipalities*	2 Tripoli Majdalayaa Zgharta	10 Roumie Dbaiye - Zouk el Kharab - Haret el Bellane - Aaoukar Bsalim - Majzoub - Mezher Ouadi Chahrour el Soufla Sinn el Fil Fanar Zalqa - Amaret Chalhoub Biaqout Boutchai - Merdache Choueifat (Beirut Municipality not included in survey)	2 HabbouchKfar Roummane	No	No	No	1 Zahleh Maalaqa	1 Saida	2 Aabbassiye Sour	2 Zouq Mkayel Zouk Mosbeh	20	114	Lebanon Central Inspection & Ministry of Displaced (2021) Rural Development Survey of municipalities, undertaken in 2020, in Impact Open Data website. [Data gathered Q3 2020]
Housing	*Monthly rent in LBP for residential dwelling (Syrian household) [district level]*	Tripoli 409,930 Zgharta 389,370	Beirut 546,604 Metn 487,804 Aley 415,620 Baabda 371,277	Keserwan 482,487	Jbeil 439,496	Baalbek 276330	Hermel 256,369	Zahleh 409,930	Saida 372,866	Tyre 374,746	Nabatiyeh 344,963	-	368,103	United Nations High Commissioner for Refugees, World Food Programme and United Nations Children's Fund (2021) Vulnerability Assessment of Syrian Refugees in Lebanon. [Data gathered June-July 2021]
	Average residential sales value per sq m (units <=5 years old) 2019 [boundaries of place names not specified]	No data	$3,136 [Beirut] $3,443 [Ras Beirut] $4,932 [Downtown] $2,912 [Achrafieh] $2544 [Beirut Other Areas] $1,687 [Baabda]	$1,629 [Keserwan District]	$1,074 [Byblos District]	No data	No data	$918 [Zahleh District]	No data	No data	$708 [Nabatiyeh District]	-	-	Real Estate Syndicate of Lebanon (REAL) (2019) Price Index Survey 2019.
	% ownership of primary residence by one of household members [governorate level]	North 72	Beirut 48.8 Mount Lebanon 64.1	Mount Lebanon 64.1	Mount Lebanon 64.1	Baalbek El-Hermel 84.1	Baalbek El-Hermel 84.1	Bekaa 78.5	South 72.2	South 72.2	82.7	-	69.5	Central Administration for Statistics and International Labour Organisation (2019) Lebanon Labour Force and Household Living Conditions Survey 2018-2019.

Table 5 (continued) City dashboards summary data table for ten cities. *Sources:* See Table.

Theme/ sector	*Indicator*	Tripoli	Beirut	Jounieh	Byblos	Baalbek	Hermel	Zahleh	Saida	Tyre	Nabatiyeh	10 Cities	Lebanon	*Source*
Housing	*Buildings in need of major structural repair/emergency intervention (%)' based on neighbourhood profile(s)*	14.3-50.8	17.3-52.8	4.20	No data	11.1-34.6	No data	18.3	30.90	25.3	No data	-	-	UN-Habitat & UNICEF Neighbourhood Profiles (2017-2020) for most disadvantaged neighbourhoods.
	Proportion of overcrowding among Lebanese households (%) based on neighbourhood profile(s)	0.9-19.2	0.7-26.3	No data	No data	22.1-34.3	No data	6.5	9.6	3.6	No data	-	-	
	Proportion of overcrowding among non-Lebanese households (%) based on neighbourhood profile(s)	0.2-45.1	22.5.-53.3	No data	No data	38.0-57.7	No data	0.38	11.7	11.7	No data	-	-	
Water	*Regional Water Establishment*	North Water Establishment	BML Water Establishment	BML Water Establishment	North Water Establishment	Bekaa Water Establishment	Bekaa Water Establishment	Bekaa Water Establishment	South Water Establishment	South Water Establishment	South Water Establishment	-	-	UN-Habitat desk review
	Water bill collection rate by regional water establishment (%)	58	62	62	58	18	18	18	52	52	52	-	-	Fanack (2015) after MoEW (2010) updated based on personal communication with MoEW (2015).
	Drinking water supply network connection rate by regional water establishment (%)	68	85	85	68	62	62	62	87	87	87	-	-	
	Percentage distribution of primary residences according to availability of services or means and governorates: public water (2018) [governorate]	North 76.7	Beirut 90.7 Mount Lebanon 84.6	Mount Lebanon 84.6	Mount Lebanon 84.6	Baalbek-El Hermel 69	Baalbek-El Hermel 69	Bekaa 76.7	South 89.7	South 89.7	Nabatiyeh 91.1	-	82.3	Central Administration for Statistics and International Labour Organisation (2019) Lebanon Labour Force and Household Living Conditions Survey 2018-2019.

Table 5 (continued) City dashboards summary data table for ten cities. *Sources:* See Table.

Theme/ sector	*Indicator*	Tripoli	Beirut	Jounieh	Byblos	Baalbek	Hermel	Zahleh	Saida	Tyre	Nabatiyeh	10 Cities	Lebanon	*Source*
Water	*Use of improved drinking water sources (by number of residents) (%) based on neighbourhood profile(s)*	94.4-97.1	80.6-99.2	No data	No data	87.6-99.3	No data	99.0	99.3	95.7	No data	-	-	UN-Habitat & UNICEF Neighbourhood Profiles (2017-2020) for most disadvantaged neighbourhoods.
	Streets (by area) with no domestic water supply (%) based on neighbourhood profile(s)	0-6.3	0%-19.5	0	No data	0-18.3	No data	1.4	35.2	0	No data	-	-	
	Buildings not connected to the domestic water network (%) based on neighbourhood profile(s)	2.9-26.1	2.8%-17.9	0.8	No data	1.2-7.8	No data	2.4	5.2	3.7	No data	-	-	
Wastewater	*Primary residences according to type of sanitation means: Public sewage system [governorate level] (%)*	North 80.7	Beirut 100 Mount Lebanon 78.3	Mount Lebanon 78.3	Mount Lebanon 78.3	Baalbek El-Hermel 47.1	Baalbek El-Hermel 47.1	Bekaa 66.3	South 69.5	South 69.5	Nabatiyeh 35.5	-	72.9	Central Administration for Statistics and International Labour Organisation (2019) Lebanon Labour Force and Household Living Conditions Survey 2018-2019.
	Primary residences according to type of sanitation means [septic tank] [governorate level] (%)	North 17	Beirut 0 Mount Lebanon 21.3	Mount Lebanon 21.3	Mount Lebanon 21.3	Baalbek El-Hermel 52.5	Baalbek El-Hermel 52.5	Bekaa 22.9	South 29.2	South 29.2	Nabatiyeh 64.2	-	25.4	
	Use of improved sanitation (by number of residents) (%) based on neighbourhood profile(s)	78.1-93.3	78.5-98.35	No data	No data	65.2-87.7	No data	98.1	95.8	97.0	No data	-	-	UN-Habitat & UNICEF Neighbourhood Profiles (2017-2020) for most disadvantaged neighbourhoods.
	Streets [by area] with malfunctional wastewater network (%) based on neighbourhood profile(s)	17.1-51.4	10.4-37.2	42.9%	No data	7.6-39.9	No data	1.6%	13.9	34.2	No data	-	-	
	Buildings with blocked or no connection to the wastewater network (%) based on neighbourhood profile(s)	9.2-12.7	2.8-13.3	0.0%	No data	0.5-17.8	No data	1.7	3.9	5.5	No data	-	-	
Solid waste	*Is public sector-led solid waste secondary sorting operational?*	No sorting	Yes	Yes	No sorting	No sorting	No sorting	Yes	No sorting	Yes	Yes	-	-	UN-Habitat desk review
	Municipalities self-reporting existence of waste sorting and recycling	3	6 (Beirut Municipality not included in survey)	0	1	1	0	1	7	No data	2	-	-	Lebanon Central Inspection & Ministry of Displaced (2021) Rural Development Survey of municipalities, undertaken in 2020, in Impact Open Data website. [Data gathered Q3 2020]

Table 5 (continued) City dashboards summary data table for ten cities. *Sources:* See Table.

Theme/ sector	Indicator	Tripoli	Beirut	Jounieh	Byblos	Baalbek	Hermel	Zahleh	Saida	Tyre	Nabatiyeh	10 Cities	Lebanon	Source
Electricity	*Distribution of primary residences according to availability of services: Elecricity [governorate level] (%)*	North Governorate 99.7	Beirut Governorate 99.8 Mount Lebanon Governorate 99.8	Mount Lebanon Governorate 99.8	Mount Lebanon Governorate 99.8	99.7 Baalbek -El-Hermel Governorate	99.7 Baalbek -El-Hermel Governorate	99.9 Zahle Governorate	South governorate 99.4	South governorate 99.4	Nabatiyeh Governorate 99.6	-	99.7	Central Administration for Statistics and International Labour Organisation (2019) Lebanon Labour Force and Household Living Conditions Survey 2018-2019.
	Municipalities self-reporting existence of alternative energy by type	Yes Ouaidi En-Nahle Municipality - Solar	Yes Sinn El Fil - Solar Roumieh - 'Other' (Beirut Municipality not included in survey)	No	Yes Jbeil Municipality - Solar	Yes Baalbek Municipality - Solar	Yes Hermel Municipality - Solar	Yes Zahle Maalaqa Municipality - 'Other'	Yes Saida Municipality - Solar	No	No	8	-	Lebanon Central Inspection & Ministry of Displaced (2021) Rural Development Survey of municipalities, undertaken in 2020, in Impact Open Data website. [Data gathered Q3 2020]
	Buildings connected with critical defects to the public electrical grid (%) based on neighbourhood profile(s)	12.7-56.9	3.4-56.4	4.2	No data	10.8-15.4	No data	12.6	29.4	40.2	No data	-	-	UN-Habitat & UNICEF Neighbourhood Profiles (2017-2020) for most disadvantaged neighbourhoods.
	Streets [by area] with no street lighting (%) based on neighbourhood profile(s)	3.1-5.1	4-32.5	15.6	No data	3.2-9.6	No data	4.9	36.6	29.8	No data	-	-	
Urban mobility	*Proportion of the population with convenient access to public transport (%)*	30.88	20.05	No data	No data	8.24	No data	49	24.41	10.62	No data	-	-	UN-Habitat Urban Indicators Database (2021)
Health	*COVID cases as % of national total, relative to population as % of national total, self-reported by municipalities*	6.0 of COVID cases; 2.1 of population	18.4 of COVID cases; 18.3 of population (Beirut Municipality not included in survey)	1.9 of COVID cases; 1.5 of population	0.6 of COVID cases; 0.6 of population	1.4 COVID cases; 1.4 of population	1 of COVID cases; 0.5 of population	1.5 of COVID cases; 1.0 of population	3.5 of COVID cases; 1.8 of population	2.2 of COVID cases; 2.0 of population	0.9 of COVID cases; 0.2 of population	433,260	-	Lebanon Central Inspection & Ministry of Displaced (2021) Rural Development Survey of municipalities, undertaken in 2020, in Impact Open Data website. [Data gathered Q3 2020]
	Primary healthcare centres (PHCCs)	47	147	10	4	6	5	7	37	12	11	286	-	Inter-agency Coordination Lebanon, in UN-Habitat & UNICEF Neighbourhood Profiles Geoportal, viewed Jul 2021

Table 5 (continued) City dashboards summary data table for ten cities. *Sources:* See Table.

Theme/ sector	*Indicator*	Tripoli	Beirut	Jounieh	Byblos	Baalbek	Hermel	Zahleh	Saida	Tyre	Nabatiyeh	10 Cities	Lebanon	Source
Health	*Secondary healthcare centres (SHCCs)*	11	28	1	3	3	1	4	12	3	5	71	-	Inter-agency Coordination Lebanon, in UN-Habitat & UNICEF Neighbourhood Profiles Geoportal, viewed Jul 2022
	Chronically ill Lebanese (%) based on neighbourhood profile(s)	11.1-15.1	2.1%-20.1	No data	No data	14.2-20%	No data	8.2	13.0	8.3	No data	-	-	UN-Habitat & UNICEF Neighbourhood Profiles (2017-2020) for most disadvantaged neighbourhoods.
	Chronically ill non-Lebanese (%) based on neighbourhood profile(s)	8.1-16.7	0.7-29.6	No data	No data	8.-19.3	No data	6.5	13.7	9.8	No data	-	-	
	Care seeking for diarrhoea based on neighbourhood profile(s)	348-55.7	40.3-100	No data	No data	14.5-85.7	No data	100.0	57.1	90.2	No data	-	-	
	Health insurance coverage among Lebanese based on neighbourhood profile(s)	15.7-27.5	19.3-92.1	No data	No data	20.4-35.6	No data	40.7	27.5	27.4%	No data	-	-	
	Health insurance coverage among non-Lebanese household members based on neighbourhood profile(s)	3.9-9.1	0.7-29.6	No data	No data	0.9-15.2	No data	3.3	5.2	25.4	No data	-	-	
Education	*Number of schools [Public]*	107	146	8	5	12	5	14	20	7	13	317	-	Inter-agency Coordination Lebanon, in UN-Habitat & UNICEF Neigh-bourhood Pro-files Geoportal, viewed Jul 2021
	Number of schools [UNRWA]	10	12	0	0	2	0	0	18	11	0	35	-	Inter-agency Coordination Lebanon, in UN-Habitat & UNICEF Neigh-bourhood Pro-files Geoportal, viewed Jul 2022

Table 5 (continued) City dashboards summary data table for ten cities. *Sources:* See Table.

Theme/ sector	Indicator	Tripoli	Beirut	Jounieh	Byblos	Baalbek	Hermel	Zahleh	Saida	Tyre	Nabatiyeh	10 Cities	Lebanon	Source
Education	*Primary school attendance among children [6–11] (%) based on neighbourhood profile(s)*	56.3-90.1	56.4-91.1	No data	No data	74-82	No data	72.6	89.9	83.5	No data	-	-	UN-Habitat & UNICEF Neighbourhood Profiles (2017-2020) for most disadvantaged neighbourhoods.
Education	*Secondary school attendance among children [12–17] (%) based on neighbourhood profile(s)*	40.2-74.1	27.9-75.7	No data	No data	49-63.8	No data	57.1	60.1	63.7	No data	-	-	
Education	*School dropouts among Lebanese children [4-16] [%] i.e. the percentage of youth outside the school system, as reported by the local authority. Highest and lowest scores among municipalities in each city shown.*	2-20	0-30 (Beirut Municipality not included)	0-15%	8-8	10-30	29-29	15-15	2-50	5-5	1-1	-	-	Lebanon Central Inspection & Ministry of Displaced (2021) Rural Development Survey of municipalities, undertaken in 2020, in Impact Open Data website. [Data gathered Q3 2020]
Public space	*Unbuilt land cover within city perimeter 2021 km sq*	11.7	46.0	4.4	3.6	11.1	2.0	6.6	5.6	9.2	5.8	-	-	European Commission (2018) Joint Research Centre Data Catalogue: Global Human Settlement Layer 2018, analysed jointly by UN-Habitat Regional Office of Arab States and UN-Habitat Lebanon (2021). UN-Habitat Lebanon (2021) City boundaries.
Public space	*Unbuilt land cover within city perimeter 2021 %*	47.6	41.6	40.9	45.7	54.1	41.6	56.8	34.9	55.9	50.3	-	-	
Public space	*Unbuilt land cover per person 2021 sq m*	34.9	36.4	42.5	117.3	145.3	66.2	77.9	28.6	73.9	109.9	-	-	European Commission (2018) Joint Research Centre Data Catalogue: Global Human Settlement Layer 2018, analyzed jointly by UN-Habitat Regional Office of Arab States and UN-Habitat Lebanon (2021). Inter-Agency Coordination Lebanon (2020) Population package 2020, used in Government of Lebanon and the United Nations (2021) Lebanon Crisis Response Plan. UN-Habitat (2021) City boundaries.

Table 5 (continued) City dashboards summary data table for ten cities. *Sources:* See Table.

Theme/ sector	Indicator	Tripoli	Beirut	Jounieh	Byblos	Baalbek	Hermel	Zahleh	Saida	Tyre	Nabatiyeh	10 Cities	Lebanon	Source
Public space	Population within 400m walking distance to an open public space	72.81	No data	No data	No data	45.18	No data	No data	No data	No data	No data	-	-	UN-Habitat Urban Indicators Database (2021)
	Neighbourhood area comprising open spaces (%) based on neighbourhood profile(s)	2.3-20.9	4.8-27.7	32.2	No data	25.7-34.2	No data	19.9	28.9	33.8	No data	-	-	UN-Habitat & UNICEF Neighbourhood Profiles (2017-2020) for most disadvantaged neighbourhoods.
	Open spaces (by area) that are publicly used (%) based on neighbourhood profile(s)	21-23	8.3-37.4	1.1	No data	4.6-35.2	No data	37	16.6	21.0	No data	-	-	UN-Habitat & UNICEF Neighbourhood Profiles (2017-2020) for most disadvantaged neighbourhoods.
	Open spaces (by area) that are privately used (%) based on neighbourhood profile(s)	77-78	48.1-91.3	83.2	No data	64.8-95.4	No data	61.9	83.4	79.0	No data	-	-	UN-Habitat & UNICEF Neighbourhood Profiles (2017-2020) for most disadvantaged neighbourhoods.
Protection	Lebanese children (5–17) involved in economic activities (%) based on neighbourhood profile(s)	6.1-13.8	2.6-10.2	No data	No data	3.3-9.6	No data	2.6	8.1	4.1	No data	-	-	UN-Habitat & UNICEF Neighbourhood Profiles (2017-2020) for most disadvantaged neighbourhoods.
	Non-Lebanese children (5–17) involved in economic activities (%) based on neighbourhood profile(s)	6.4-18.9	2.7-15.7	No data	No data	2.9-15.5	No data	4.0	15.5	6.0	No data	-	-	UN-Habitat & UNICEF Neighbourhood Profiles (2017-2020) for most disadvantaged neighbourhoods.
	Young women aged 15–19 who are currently married based on neighbourhood profile(s)	5.1-18.4	1.8-36	No data	No data	3.8-11.8	No data	15.6	18.6	14.0	No data	-	-	UN-Habitat & UNICEF Neighbourhood Profiles (2017-2020) for most disadvantaged neighbourhoods.
	Lebanese children (5–17) involved in economic activities who are exposed to any hazardous work condition (%) based on neighbourhood profile(s)	48-73.3	0-77.8	No data	No data	45.5-57.1	No data	20	82.1	54.6	No data	-	-	UN-Habitat & UNICEF Neighbourhood Profiles (2017-2020) for most disadvantaged neighbourhoods.
	Non-Lebanese children (5–17) involved in economic activities who are exposed to any hazardous work condition (%) based on neighbourhood profile(s)	65.3-76.5	43-95.5	No data	No data	38.9-53.9	No data	28.6	65.6	80	No data	-	-	UN-Habitat & UNICEF Neighbourhood Profiles (2017-2020) for most disadvantaged neighbourhoods.

Table 5 (continued) City dashboards summary data table for ten cities. *Sources:* See Table.

Theme/ sector	*Indicator*	**Tripoli**	**Beirut**	**Jounieh**	**Byblos**	**Baalbek**	**Hermel**	**Zahleh**	**Saida**	**Tyre**	**Nabatiyeh**	**10 Cities**	**Lebanon**	*Source*
Safety & security	*Lebanese households that have faced disputes in the area (%) based on neighbourhood profile(s)*	1.1-13.8	0.3-32.7	No data	No data	0.7-2.9	No data	0.2	2.9	0.6	No data	-	-	UN-Habitat & UNICEF Neighbourhood Profiles (2017-2020) for most disadvantaged neighbourhoods.
	Source of tension: Competition for services and utilities (Aug 2021) all nationality cohorts	6.1 North Governorate	20.8 Beirut Governorate 32 Mount Lebanon Governorate	32.1 Mount Lebanon Governorate	32.1 Mount Lebanon Governorate	66 Baalbek-El Hermel Governorate	66 Baalbek-El Hermel Governorate	8.2 Bekaa Governorate	24.5 South Governorate	24.5 South Governorate	24.5 South Governorate	-	-	ARK and UNDP (2021) Overview of Communal Relations in Lebanon: Wave XI August.
	Non-Lebanese households that have faced disputes in the area (%) based on neighbourhood profile(s)	2.2-6.4	0.3-11.2	No data	No data	0.6-5.4	No data	1.4	2.5	1.2	No data	-	-	UN-Habitat & UNICEF Neighbourhood Profiles (2017-2020) for most disadvantaged neighbourhoods.
Cultural heritage	*Is the city CHUD-designated?*	Yes	No	No	Yes	Yes	No	No	Yes	Yes	No	-	-	World Bank Group
	UNESCO designation?	UNESCO tentative list (2019)	UNESCO Creative Cities Network member designation (2019)	No	UNESCO World Heritage Site - Cultural type designation (1984)	UNESCO World Heritage Site - Cultural type designation (1984)	No	UNESCO Creative Cities Network member designation (2013)	On UNESCO tentative list (2019)	UNESCO World Heritage Site - Cultural type designation (1984)	No	-	-	UNESCO (2021) Webpage: Properties inscribed on the World Heritage List; UN-Habitat desk review.
	Municipalities in city self-reporting existence of initiatives and projects in past five years to improve tourism sector	El Mina Majdalaya Zgharta	Antelias - Naqqach Choueifat Chiyah (Beirut municipality not included in the survey)	No	Jbeil	Baalbek	Hermel	Zahle Maalaqa	Haret Saida Saida	Aabbassiye Sour	No	13	130	Lebanon Central Inspection & Ministry of Displaced (2021) Rural Development Survey of municipalities, undertaken in 2020, in Impact Open Data website. [Data gathered Q3 2020]

Table 5 (continued) City dashboards summary data table for ten cities. *Sources:* See Table.

Spatial and administrative context



Photo of Zahleh. ©Ahmad Chinder, 2021

Spatial and administrative context

Lebanon's urbanized population compared to the region

The share of Lebanon's de facto population of 5.6m (IACL, 2020)[32] estimated to be urban is, at 88.9% in 2020, higher than that of the European (74.9%) or Western Asia (72.3%) regional average (Table 6) (UNDESA, 2018b). Within the Western Asia region, however, Lebanon is not an outlier: of the 18 Western Asia nations, five countries are more urban (Bahrain, Israel, Jordan, Kuwait, Qatar).

	2015	2020	2025	2030
Lebanon	88.1%	88.9%	89.8%	90.6%
Western Asia	70.4%	72.3%	73.8%	75.4%
Europe	73.9%	74.9%	76.1%	77.5%

Table 6 Percentage of population residing in urban areas, by country and area, from 2015 to 2030. *Source:* United Nations Department of Economic and Social Affairs, Population Division, 2018:308.



Figure 2 distinguishes between absolute urban population and the proportion of the overall population that is urban. The population living in Lebanon's cities was on an upward trajectory before 2011. From that point until 2019, the count increased dramatically, at least partly inflated by the influx of Syrians from 2011. From 2020, there is a projected decrease in urban population of some years' duration. However, what is notable across all these phases is that the proportion of the overall population that is urban continues to rise inexorably; indeed it is expected to reach 90.6% by the start of the 2030s.

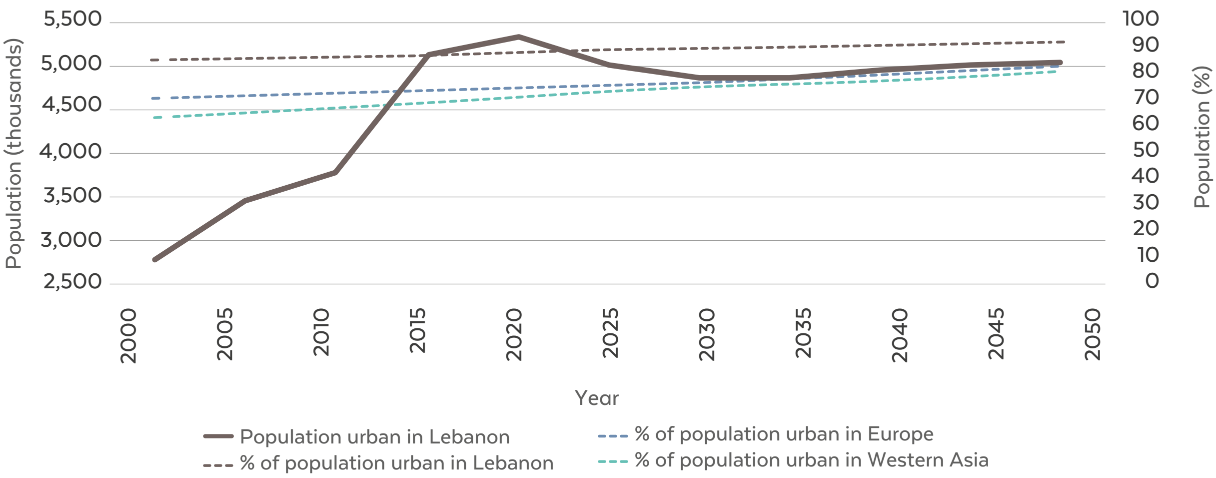


Figure 2 Urban population in Lebanon, Europe and West Asia over 2000 to 2050 (2018 data year). *Source:* UNDESA (2018b).

Lebanon's built up land cover

Lebanon's land area is 10,452km^2 (CAS, 2007). Of this, 4.87% has been determined to be built up (UN-Habitat ROAS, forthcoming) based on GHSL imagery (EC, 2018). Across nine selected countries in the region, Lebanon showed the second-highest urban proportion after Palestine.[33] The geographic concentration of built up land cover and, by extension, population on the Mediterranean seaboard is shown in Figure 3, which also indicates the 2021 boundaries of the ten selected cities analyzed in this report. The map shows built up land cover averaged at cadastre level. One of the cities, Hermel, is sited in an atypically large cadastre so the city's built concentration does not register as highly built up within the GIS parameters of Figure 3.

32 The population figure adopted in this report is of 5,587,563 (UN and Government of Lebanon, 2021). Other national estimates vary.

33 The UN-Habitat regional analysis of land cover used the Global Human Settlement Layer (European Commission, 2018). Built-up land cover shares by country were: Egypt 1.2%; Iraq 2.45%; Jordan 1.61%; Lebanon 4.87%; Libya 0.18%, Palestine 14.33%, Syria 1.91%; Tunisia 3.38%; Yemen 0.21% (UN-Habitat Regional Office of Arab States, forthcoming).



Figure 3 Map of Lebanon showing % of land cover that is built up by cadastre. *Source:* UN-Habitat based on satellite imagery from European Commission (2018).

Built-up land cover by governorate

It is useful to consider the concentration of built up land by the main administrative divisions to help inform how the various institutional entities may relate to the urban agenda. The eight[34] governorates[35] of Lebanon vary greatly in terms of the share of their land cover that is built up, from 72.5% in Beirut to 3% in Baalbek-El Hermel (Table 7). The largest area of built up land cover in absolute terms is in Mount Lebanon Governorate, which accounts for 27% of all built up land in the country.

Governorate	*Area km²*	*Built-up area km²*	*Area built-up %*
Akkar	790	75.6	9.6
North	1,187	79.7	6.7
Beirut	21	15.4	72.5
Mount Lebanon	1,973	190.3	9.6
Bekaa	1,413	62.8	4.4
Baalbek-Hermel	2,853	85.9	3.0
South	924	113.4	12.3
Nabatiyeh	1,100	90.1	8.2

Table 7 Governorates by proportion of land that is built up. *Source:* European Commission (2018) Joint Research Centre Data Catalogue: Global Human Settlement Layer (viewed 2021).

Administrative tiers

Governorates and districts

Lebanon's eight governorates[36] are subdivided into a total of 26 districts.[37] The area of Beirut Governorate, with its special administrative status, is also district (and municipality) in its own right. Governorates and districts are both deconcentrated bodies of central government at subnational level without administrative or financial autonomy from the centre. The heads of governorates (governors) and districts (district commissioners) report to the Ministry of Interior and Municipalities (MOIM).

Municipalities

'(E)ach municipality has a jurisdiction over matters of public interest within its boundaries.[38] Municipal responsibilities are diverse and include: planning, infrastructure works in various domains such as water, waste and wastewater networks, territorial and urban management, economic development, environmental protection, as well as the provision of health, social, educational, cultural and sports facilities and services.' (SNG-WOFI, 2017)

Municipalities are the only decentralized government tier in Lebanon. The country has a high count of municipalities relative to its land area, totaling 1,047 at 2021 (IACL, 2021). Moreover, this number has proliferated dramatically from 638 in 1998 (DRI, 2017). Municipalities, representing an increasingly fragmented governance layer, have thus become ever-smaller on average in recent decades, holding an average 6,221 inhabitants each (SNG-WOFI, 2017).

The municipality has a decision-making authority under its municipal council and an executive authority in the form of its mayor (Ibid). Municipalities have wide-ranging duties as noted in the Box above but – despite their official decentralized status - constrained powers in terms of administrative autonomy from central government and fiscal capacities. Several municipal functions are subject to varying degrees of supervision by central government or its deconcentrated wings.



Photo in Beirut. ©UN-Habitat, 2021

34 The eight governorates is sometimes collapsed to six or seven. Since 2017 a ninth governorate (Byblos) was delimited though has not been used consistently. The eight-governorate format adopted by the Inter-Agency Coordination Lebanon Information Management Unit is used herein (IACL, 2021) Lebanon Map Hub website).

35 Equivalent to Administrative Level 1.

36 Equivalent to Administrative Level 1.

37 Equivalent to Administrative Level 2.

38 1997 Municipal Act [as amended] Article 47

Unions of municipalities



Figure 4 Map of Lebanon showing land coverage by unions of municipalities, the selected ten cities and the seven governorates. *Source*: UN-Habitat Lebanon, 2021.



Photo of Baalbek. ©Ahmad Chinder, 2021

63%
of Lebanon's territory is covered by unions of municipalities

Unions of municipalities are formed by decree at the request of the municipalities or through the initiative of the MOIM (Darwich, 2018:25).[39] UoMs are thus tiers of local government. Unionization is generally predicated on the desire to coordinate on common projects and to pool resources for aspects of public service delivery that can be better achieved at this supra-municipal level (including roads, wastewater system, solid waste management, slaughterhouses, transport, markets, civil defense, coordination in the overall planning system for the area) (SNG-WOFI, 2017). UoMs are increasingly taking on the production of strategic plans, though these are non-binding in nature (Darwich, 2018). They are institutional structures animated by the need for spatial collaboration at a level above the municipality. In this sense, UoMs are a compelling barometer of the need for inter-municipal strategic collaboration. The number of UoMs has grown rapidly – from 13 in 1998 (DRI, 2017) to 54 currently (IACL, 2021). Significantly, the rise in number of UoMs has paralleled the abovementioned rise in number of municipalities over the same period. A majority 63% of Lebanon's territory is now covered by UoMs (Figure 4).

UoMs gain their funding from their municipalities, from state grants and sometimes from international organizations; they are not authorized to collect taxes. There is divergence of opinion among UoM presidents as to whether UoMs should be conceptualized as leading municipalities and thus need to be strengthened; or whether they should be cast as supplementing the work of municipalities, from which vantage point capacity-building of municipalities would be the focus (DRI, 2017).

The urban hierarchy in Lebanon

The national statistical system in Lebanon does not as yet offer official urban/rural land designations, so a nationally defined hierarchy of cities, towns and villages is not available. The National Physical Masterplan of the Lebanese Territories (DAR-IAURIF, 2005; decreed 2009) described

- A Central Urban Area anchored on Beirut at the apex;
- A second-city agglomeration of Tripoli;
- A set of other large agglomerations (Baalbek, Zahleh-Chtaura, Nabatiyeh, Saida, Tyre, Byblos);
- A group of 'other cities and villages' (Table 15).

Concluding points

- Lebanon's population is highly urbanized, at 88.9% in 2020. This proportion is projected to rise to 90% by 2030. The urban agenda is one of high and increasing importance to Lebanon's sustainable development.
- Of Lebanon's territory, 4.87% is built land cover, which is already high compared to most other countries in the region.
- Lebanon's cities have no dedicated urban authority. Municipalities, the only government tier that is officially decentralized, have a track record in coordinating at inter-municipal level on strategic matters including urban planning and public service delivery through UoMs, which cover about two-thirds of the territory. Established expertise and experience in inter-municipal collaboration may stand to be harnessed to coordinate city-level approaches to sustainable urban development.
- There are no official designations of cities, towns and villages in Lebanon, though a nascent urban hierarchy topped by a Central Urban Area containing Beirut is described in the National Physical Master Plan of the Lebanese Territories. Beirut is a primate city, whilst the NPMPLT (DAR-IAURIF, 2005) and the Lebanon Constitution (1926 as amended) commit to balanced development across the Lebanese regions, presenting a tension to be deliberated on through spatial and urban development policy fora.

39 As per provisions of the 1977 Municipal Act (Article 115). UoMs' sizes and responsibilities are not prescribed therein.

Urban space and population



Photo of Tripoli. ©Ahmad Chinder, 2021

Urban space and population

Constructive conversations about city planning and management must begin with a shared understanding of two paramount contextual drivers: where urban settlements are located; and how many people they contain. The foregoing Methodology section noted the absence in Lebanon of official geographical delineation of urban/rural areas and settlement as well as the lack of robust population data. The current chapter offers a working definition of city boundaries for the ten largest cities and associated population estimates. The exercise demonstrates how the setting of geographical urban boundaries helps identify who the direct city stakeholders are beginning with municipalities; enables a rough population baselining; and offers a geographic frame to synchronize multisectoral deliberations about urban futures between stakeholders.



Photo of Beirut. ©Ahmad Chinder, 2021



Photo of Byblos. ©Ahmad Chinder, 2021

Space



Figure 5 Map of Lebanon showing the location of the ten selected cities across Lebanon's governorates and 26 districts. *Source:* UN-Habitat, 2021e.

Administrative setting of the ten cities

Figure 5 shows the urban footprints and geographical location of the ten selected cities across Lebanon's governorates and districts.

- The cities are made up of whole or part of between 31 municipalities (Beirut) and 1 municipality (Hermel).
- One city, Beirut, traverses two governorates (Beirut Governorate, Mount Lebanon Governorate).
- Two cities span district boundaries (Beirut reaches across four districts and Tripoli three). The remaining cities are each contained within a single district (Table 8).
- Regarding the unionization status of municipalities in the cities, Figure 4 and Table 8 show that all municipalities in the selected cities are fully or partly within one or more UoMs.
- The configuration of jurisdictions and thus stakeholders making up each city in the above terms is diverse, reinforcing the premise that any institutional and stakeholder configurations mobilized to support urban management and planning must be locally tailored.

City	*Governorate*	*District*	*Cadastres*		*Municipalities*		*Unions of Municipalities*
			No.	*Names*	*No.*	*Names*	*No. of unions fully or partly in city*
Tripoli	North	Miniyeh-Danniyeh, Tripoli, Majdalaya Zgharta	18	Beddaoui, Mina Jardin, Mina No. 1, Mina No. 2, Mina No. 3, Trablous El-Hadid, Trablous El-Mhatra, Trablous El-Haddadine, El-Hadid, El-Mharta, Trablous El-Qobbe, Trablous En-Nouri, Trablous Er-Remmaneh, Trablous Es-Souayqa, Trablous Tabbaneh, Trablous El-Tell, Trablous El-Zahrieh, Trablous El- Zeitoun, Trablous Jardins, Mejdlaiya Zgharta	5	Ouadi Nahle, El-Beddaoui, El-Mina, Tripoli, Majdalaya Zgharta	2
Beirut	Beirut	Beirut, Aley, Baabda, Metn	55	Aain el-Mraisse foncière, Achrafieh foncière, Bachoura foncière, Beirut Central District, Marfa' foncière, Mazraa foncière, Mdaouar foncière, Mina el-Hosn foncière, Msaitbe foncière, Ras Beyrouth foncière, Rmeil foncière, Saifi foncière, Zqaq el-Blat foncière, Aaramoun Aaley, Bchamoun, Choueifat El-Aamrousiye, Choueifat El-Oumara, Choueifat El-Quoubbe, Deir Qoubel, Baabda, Louayze Baabda, Bourj El-Brajneh, Boutchay, Merdache, Furn Chebbak, Chiyah, Hadath Beyrouth, Haret Hreik, Kfar Chimaa	31	Beirut, Ain Saade, Borj El-Brajne, Ghobeire, Choueifat, Aaramoun, Jdaide - Baouchriye - Sad El-Baouchriye, Mansouriye - Mkalless - Daychouniye, Hadet, Baabda, Sinn El-Fil, Bchamoun, Biaqout, Bqennaya - Jall Dib, Dekouane	3
	Mount Lebanon			Ouadi Chahrour Soufla, Laylake, Tahouitat El-Ghadir, Aain Saade, Antelias, Naqqach, Byaqout, Bourj Hammoud, Bqennaya, Jall Dib, Majzoub, Menqlet Mezher, Dbaye, Haret El-Ballane, Mazraat Deir Aaoukar, Zouk El-Kharab, Deir Mar Roukoz, Dekouane, Fanar, Baouchriye, Jdaidet El-Matn, Mkalles, Roumie, Sinn El-Fil, Aamaret Chalhoub, Zalqa		Roumie, Zalqa - Amaret Chalhoub, Dbaiye - Zouk el Kharab - Haret el Bellane - Aaoukar, Fanar, Boutchai - Merdache, Hazmiye, Chiayah, Furn Chebak, Kfarchima, Tahouitet el Ghadir - Lailake - Mraije, Haret Hraik, Deir Qoubil, Antelias - Naqqach, Borj Hammoud, Bsalim - Majzoub - Mezher, Ouadi Chahrour el Soufla	

Jounieh	Mount Lebanon	Keserwan	5	Jounie Ghadir, Jounie Haret Sakhr, Jounie Sarba, Zouk Mousbeh, Zouk Mkayel	3	Jounieh, Zouk Mosbeh, Zouq Mkayel	1
Byblos	Mount Lebanon	Jbeil	5	Blat Jbeil, Bmehrayn, Jbayl, Mastita, Qartaboun	5	Blat, Bmehrayn, Jbeil, Mastita, Qartaboun	1
Baalbek	Baalbek El-Hermel	Baalbek	3	Aain Bourday, El-Anser Baalbek, Baalbek	3	Aain Bourday, El-Anser Baalbek, Baalbek	1
Hermel	Baalbek El-Hermel	Hermel	1	Hermel	1	Hermel	1
Zahleh	Bekaa	Zahleh	15	Zahleh Aradi, Zahleh El-Berbara, Zahleh El-Maallaqa, Zahle El-Midane, Zahleh El-Rassiy, Zahleh Haouch El-Oumara, Aradi, Zahleh Haouch El-Zaraane, Zahleh Maallaqa Aradi, Zahleh Mar Antonios, Zahleh Mar Elias, Zahleh Mar Gerges, Zahleh, Saydet El-Najat, Ksara	2	Zahleh Maalaqa, Ksara	1
Saida	South	Saida	11	Aabra Saida, Bqosta, Bramiye, Darb El-Sim, Haret Saida, Hlaliye Saida, Majdelyoun, Miye ou Miy, Saida El-Dekermane, Saida El-Oustani, Saida El-Qadimeh	9	Aabra, Bqosta, Bramiye, Darb El-Sim, Haret Saida, Hlaliye Saida, Majdelyoun, Miyeh ou Miyeh, Saida	1
Tyre	South	Sour	4	Aabbassiye, Aain Baal, Borj El-Chmali, Sour	4	Aabbassiye, Aain Baal, Borj El-Chmali, Sour	1
Nabatiyeh	Nabatiyeh	El-Nabatiyeh	6	Habbouch El-Nabatiyeh, Kfar Roummane, Mazraat Kfarjaouz, Nabatiye El-Faouka, Nabatiye El-Tahta, Zibdine Nabatiyeh	6	Habbouch El-Nabatiyeh, Kfar Roummane, Mazraat Kfarjaouz, Nabatiye El-Faouka, Nabatiye El-Tahta, Zibdine Nabatiyeh	1
10			123		69		12

Table 8 Administrative details of the ten selected cities. Source: UN-Habitat, 2021.



Photo in Baalbek. ©UN-Habitat, 2019



Photo of Saida. ©Ahmad Chinder, 2021

Area of continuously built up cities and their expansion

Figure 6 shows the ten cities selected for analysis in the current report. It indicates their urban forms two-dimensionally in terms of continuously built-up areas at 1990 and 2021.



Figure 6 Map of Lebanon showing the location of the ten selected cities across the 26 districts and the expansion of the cities' continuously built up areas from 1990 to 2021. *Source:* UN-Habitat, 2021e; EC (2018); Google Earth (2021)

In Lebanon, by far the largest urban footprint is that of the capital Beirut which, at 110km^2 in 2021, is 4.5 times the area of the second largest city, Tripoli. Of the ten cities, Beirut also accounted for the greatest absolute area of urban expansion, adding 30.7km^2 over the 1990 to 2021 period (Table 9).

City	*City area (km²)*		*City area change 1990-2021*	
	1990	*2021*	*km²*	*Percent*
Tripoli	16.1	24.5	8.5	52.6
Beirut	79.9	110.6	30.7	38.4
Jounieh	5.8	10.8	5.0	87.5
Byblos	3.7	8.0	4.2	114.5
Baalbek	2.5	20.5	18.0	717.0
Hermel	1.3	4.7	3.4	249.7
Zahleh	5.0	11.6	6.6	132.5
Saida	11.4	16.0	4.6	40.4
Tyre	7.0	16.4	9.4	134.3
Nabatiyeh	2.5	11.6	9.0	357.1
10 cities	135.2	234.6	99.4	73.5

Table 9 Area of continuously built up cities and change 1990-2021. *Source:* UN-Habitat, 2021.

The spatiality of urban land expansion has been primarily concentric for the inland cities and partially concentric extending inland to the east for the coastal cities (Figure 6). Beirut and Jounieh, geographically separate at 1990, have since expanded respectively north and south along the seaboard to almost meet by 2021. Strip development extending along main transport corridors out of the cities augments the overall concentric growth format. The current analysis does not consider urban growth that may have leapfrogged the urban boundary to transport route-mediated satellite locations; nor intra-urban densification including vertical growth. The totality of these urban growth formats are relevant when considering policies to manage and direct future urban growth.

Comparing city area at 2021 to proportional growth over the last three decades, Figure 7 shows a top-left quadrant of relatively small yet dynamically growing cities which have more than doubled their footprint over 1990-2021. These are Hermel (250% urban expansion 1990-2021), Nabatiyeh (357%) and Baalbek (an enormous 718 increase). Notably, the inland location of these settlements (Figure 6) may be one factor easing their peripheral expansion in a manner less possible for the seabound coastal cities. On the axes of Figure 7, Beirut alone occupies the large/slow-growing bottom-right quadrant; its 38.4% expansion however yields the largest absolute addition of built-up area from any one city (30.7km^2) over the period (Table 9).

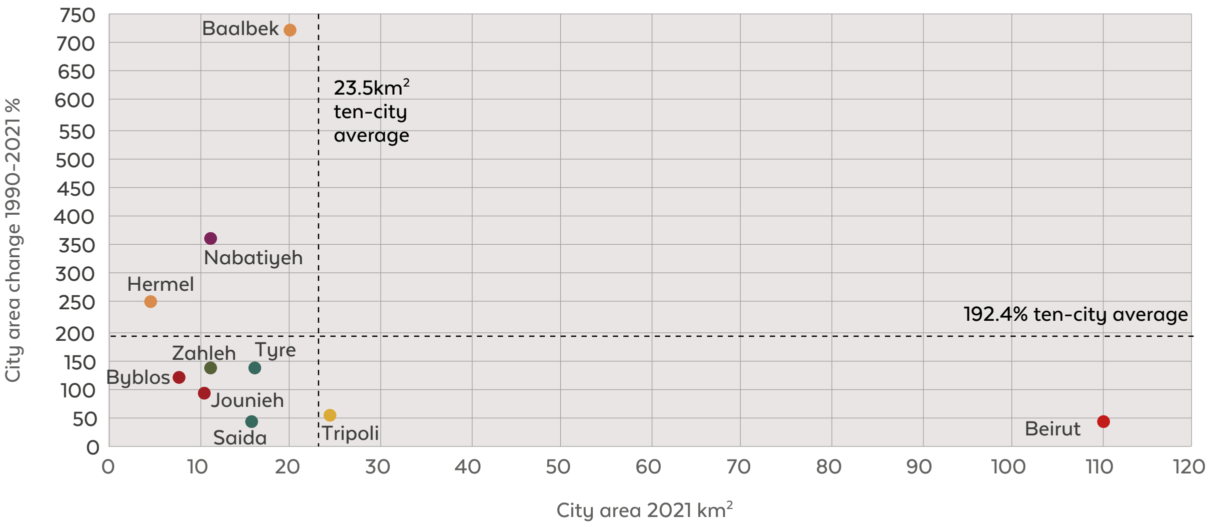


Figure 7 Ten selected cities by city area (2021) and city area % change 1990-2021. *Source:* UN-Habitat (2021) based on European Commission (2018); Google Earth (2021).

Measuring change in the boundary of the continuously built-up area of cities is a partial dimension of urban growth as noted above. Nonetheless, the strikingly wide range of urban footprint change figures across the ten cities shows that the anatomy of Lebanon's overall urbanization comprises geographically non-uniform evolution across its cities. At least in terms of continuously built up land area, Lebanon's cities are on different future growth trajectories. As a simplistic thought experiment, a naive linear projection of urban land area growth across these cities over the next 30 years based on the 1990-2021 data would see Baalbek taking over from Tripoli as the second-largest city by 2050.

Understanding the relative growth trajectories of Lebanon's cities is important for a number of reasons. Decisions stand to be made through urban planning as part of a national spatial development framework about the extent to which city growth trends will be accommodated or constrained through policy interventions. Based on that, infrastructure and service investment decision-making ideally should solve for future spatialized demographic

demand, noting that such built investments are costly, durable over time and hard to reverse.

Built-up land cover by city

Across the ten selected cities, the proportion of land cover that is built up within the city perimeters was identified. The percentage built up varies moderately between a relatively low-density 43.2% (Zahleh) to a relatively high 65.1% (Saida) (Table 10). Density does not appear to bear a relationship to city size across this sample, with the density of the largest and smallest cities (Beirut and Hermel) both at 58.4% (Figure 8). For the less densely built cities – Zahleh, Baalbek, Tyre, Nabatiyeh which are all under 50% – there may be particular scope for considering how urban planning policy may guide growth pressure towards intra-urban densification. For instance, urban authorities may consider pre-identifying urban pockets of vacant or lower density sites as 'areas for intensification', possibly prioritizing those where utility lines and transport infrastructure as well as social services like schools and healthcare already exist (UN-Habitat, 2020d). Integral to a densification agenda would be planning for residential and employment densification around existing or pipeline public transport nodes, with parallel measures to safeguard land for public transport use as well as public spaces.

Time series research is required on built density – snapshotted for 2018 only in the current report – to understand the differential balances of infill versus peripheral development as manifestations of urban growth.

City	*Area (km²) 2021*	*Built up area*	
		km²	*Percent*
Tripoli	24.5	12.9	51.2
Beirut	110.6	64.6	58.4
Jounieh	10.8	6.4	56.5
Byblos	8	4.3	54.3
Baalbek	20.5	9.4	45.9
Hermel	4.7	2.8	58.4
Zahleh	11.6	5	43.2
Saida	16	10.4	65.1
Tyre	16.4	7.2	44.1
Nabatiyeh	11.6	5.8	49.7

Table 10 Area of selected 10 cities and their built land coverage. *Source:* UN-Habitat, 2021.

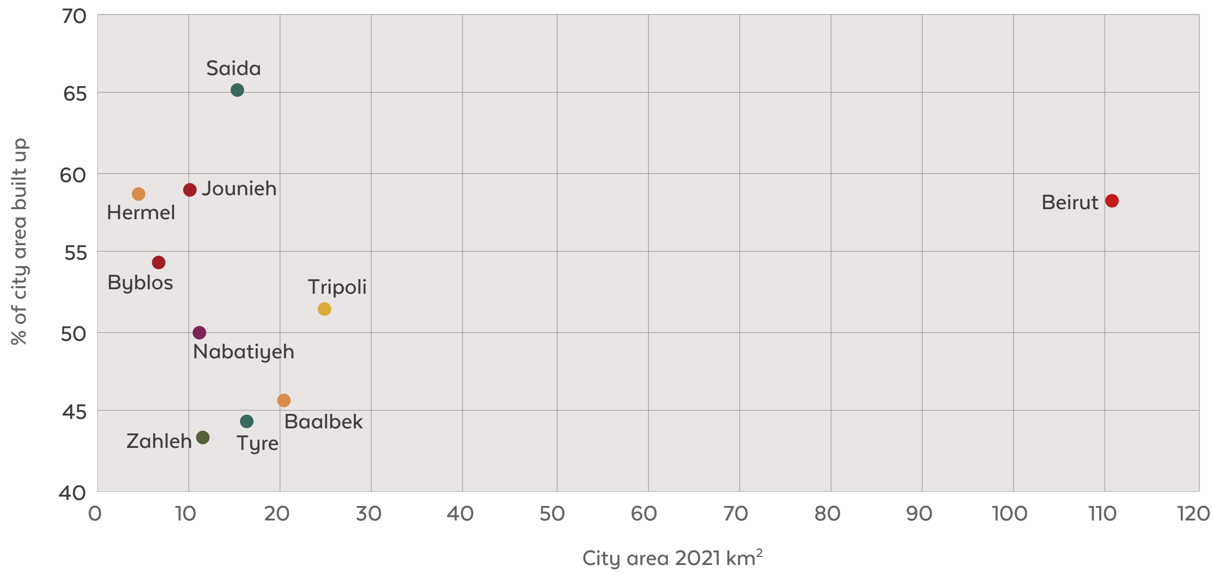


Figure 8 Ten selected cities by proportion of land within city boundaries that is built up and geographical area at 2021. *Source:* UN-Habitat (2021) based on European Commission (2018) and Google Earth (2021).



Photo in Beirut. ©UN-Habitat, 2019

Population

National population composition

The population dataset adopted in the current report indicates a total of almost 5.6m living in the country (IACL, 2020). Of these, 31% are non-Lebanese, with Syrians making up the largest portion thereof, at 1.5 million or almost 27% of the overall total (Table 11).

	Count	% of all population
Lebanese	3,864,296	69
Non-Lebanese	1,723,297	31
	Syrians	
	1,500,00	26.8
	PRL	
	180,001	3.2
	PRS	
	43,266	0.8
Total	5,587,563	100

Table 11 Population living in Lebanon by nationality cohort. *Source*: Interagency Coordination Lebanon, 2021.

Population composition in the ten cities

The combined population of the ten selected cities is 2,226,274, which is 41% of the national total.

The capital, Beirut,[40] alone contains 22.6% of the people in Lebanon, with Tripoli contributing a further substantial 6%. Insofar as the capital is 3.7 times more populous than the country's second city, Beirut is a primate city even by some of the more stringent social science definitions thereof. The strong degree of population centralization at the urban hierarchy apex[41] is not uncommon internationally, though policy positions vary between and within countries as to whether centralization on a primate city is desirable or otherwise.[42] As previously noted, Lebanon's constitution (1926 as amended) and the National Physical Master Plan of the Lebanese Territories (DAR-IAURIF, 2005, decreed 2009) both commit to balanced territorial development across the Lebanese regions.

Population in the ten cities by nationality

The ten selected cities combined have a higher share of Lebanese nationals (73%) than Lebanon overall (69%) (Table 12).

The ten cities contain

- 44% of all the approximately 3.9m Lebanese
- 36% of all 1.7m Non-Lebanese,
- 32% of the 1.5m Syrians in Lebanon
- 61% of the 0.18m PRL
- 47% of the 0.04m PRS

City	Population		Lebanese		Non-Lebanese		Syrians		PRL		PRS	
	Count	As % of national population	Count	%	Count	%	Count	%	Count	%	Count	%
Tripoli	335,004	6.0	227,741	68	107,263	32	86,875	25.9	18,401	5	1,980	1
Beirut	1,263,332	22.6	975,897	77.2	287,435	22.8	256,433	20.3	26,688	2.1	4,311	0.3
Jounieh	104,161	1.9	97,811	93.9	6,350	6.1	6,350	6.1	0	0	0	0
Byblos	30,985	0.6	28486	91.9	2,500	8.1	2,500	8.1	0	0	0	0
Baalbek	76,199	1.4	47,363	62	28,836	37.8	25,925	34.0	2,554	3	356	0.5
Hermel	29,612	0.5	22,187	75	7,425	25.1	7,425	25.1	0	0	0	0
Zahleh	86,149	1.5	45,110	52	41,039	47.6	41,040	47.6	0	0	0	0
Saida	195,095	3.5	119,632	61	75,463	38.7	26,030	13.3	39,502	20	9,933	5
Tyre	124,180	2.2	80,363	65	43,817	35	16,490	13.3	22,870	18	4,456	4
Nabatiyeh	52,966	0.9	40,798	77	12,168	23.0	11,975	22.6	194	0.37	0	0.0
10 cities	2,297,683	41.1	1,685,388	73	612,296	27	481,043	20.9	110,209	5	21,036	0.9
Lebanon	5,587,563	100	3,864,296	69	1,723,267	31	1,500,000	27	180,001	3	43,266	0.8

Table 12 Population in the ten cities by nationality. *Source*: Interagency Coordination Lebanon, 2021.

40 The Beirut City Profile (UN-Habitat, 2021) used the same cadastral population dataset as the current report. The Beirut City Profile included the total population of cadastres both fully within and partially outside the continuously built up boundary in its city population total. For cadastres partially outside the city boundary, the current report made an estimate of the share of population located within the city boundary based on a visual assessment of built up area distribution shown on satellite imagery. This slight methodological refinement means that the population count for Beirut City is thus marginally higher in Beirut City Profile (1,291,280) than in the current report (1,263,332).

41 Population centralization is typically associated with centralization of jobs, administrative functions, infrastructure, services and other attractors.

42 Views vary on whether primate cities are parasitic vis-à-vis the country's other cities or generative for the whole country. Views on the capacity of acceptable policy interventions to manipulate the urban hierarchy also vary.

Cities with disproportionately more Lebanese compared to the 69% national average are Nabatiyeh, Beirut, Byblos and Jounieh (Figure 9). At the extreme, Jounieh contains 93.9% Lebanese.

Cities with disproportionately more Non-Lebanese compared to the 31% national average are Zahleh, Saida, Baalbek, Tyre and Tripoli. At the extreme, Zahleh has 47.6% Non-Lebanese (all Syrian).

PRL and PRS are notably concentrated in the cities of Saida and Tyre, where they together comprise a significant 25% and 22% of the city populations respectively.

It is useful to register the cities with a high share of Syrians; this cohort mainly entered Lebanon from 2011 following the onset of the Syria crisis, generating a demographic shock characterized by a steep and unforeseen increase in demand for infrastructure and services. Cities likely to have experienced this shock particularly strongly are Zahleh (47.6% Syrian); Baalbek (34%); Tripoli (25.9%), Hermel (25.1%).

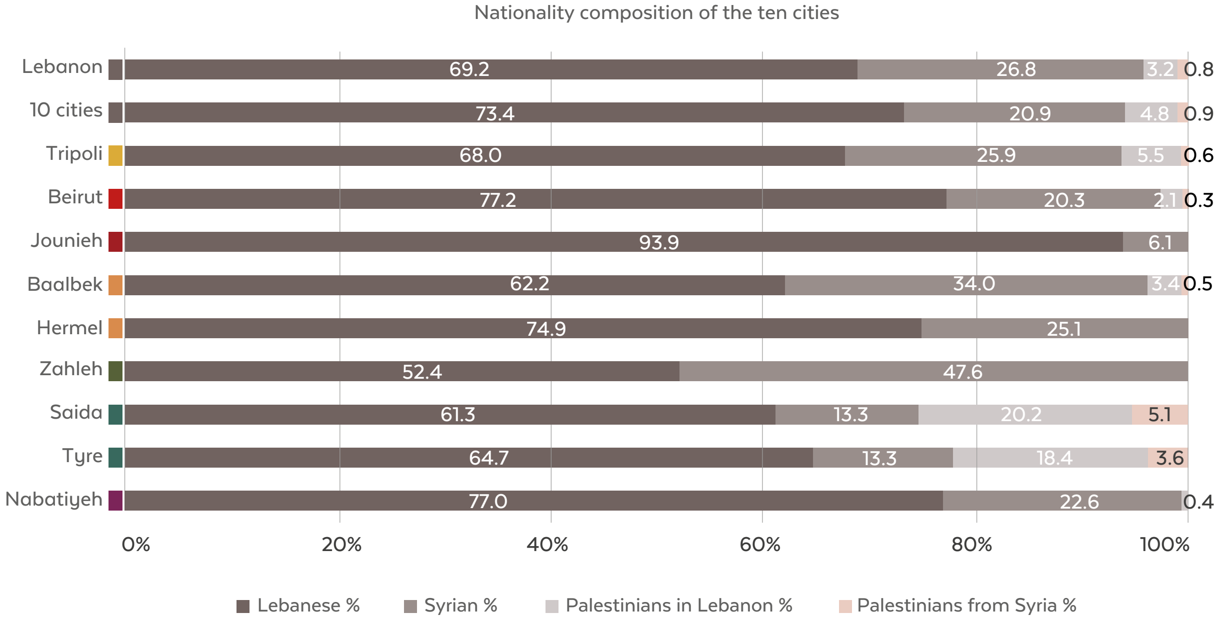


Figure 9 Ten selected cities by nationality composition. *Source:* UN-Habitat city boundaries (2021); LCRP population data from Inter-agency Coordination Lebanon (2020).

Population densities in the ten cities

Population density across the cities varies widely from the relatively sparsely inhabited Baalbek (3,718 persons/km²) to the denser Tripoli (13,653 persons/km²) (Table 13).



Photo of Zahleh. ©Ahmad Chinder, 2021

City	*Total population 2020*	*Population density (persons/km²)*
Tripoli	335,004	13,653
Beirut	1,263,332	11,427
Jounieh	104,161	9,635
Byblos	30,985	3,891
Baalbek	76,199	3,718
Hermel	29,612	6,286
Zahleh	86,149	7,284
Saida	195,095	12,220
Tyre	124,180	7,571
Nabatiyeh	52,966	4,575
10 cities	2,297,683	9,987
Lebanon	5,587,563	-

Table 13 Population and densities of the ten selected cities. *Source:* UN-Habitat, based on Interagency Coordination Lebanon (2021) and European Commission (2018).

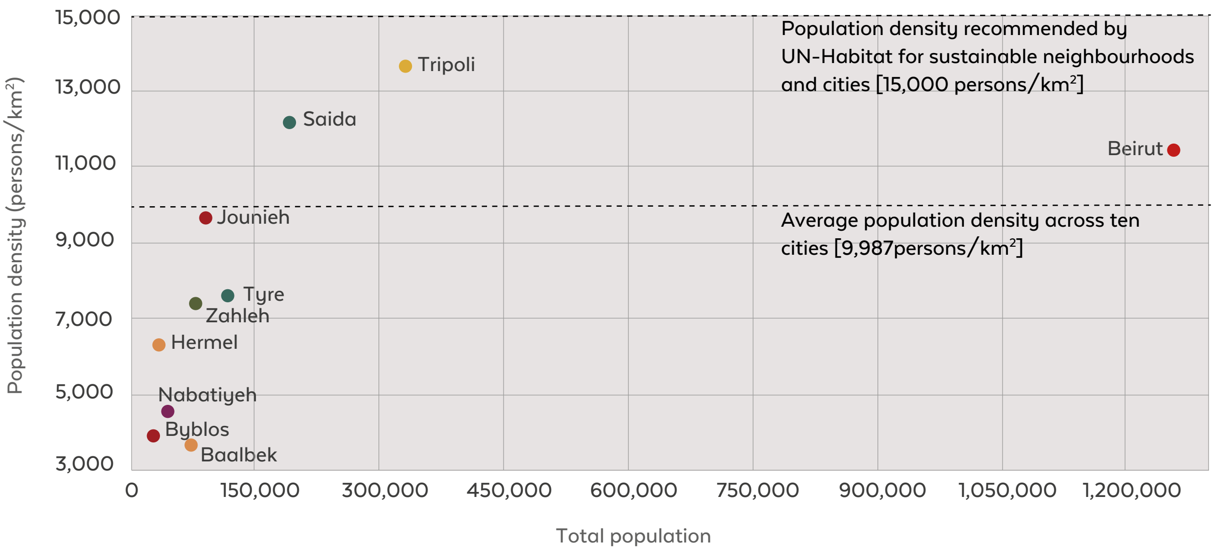


Figure 10 Ten selected cities by nationality composition. *Source:* UN-Habitat city boundaries (2021); LCRP population data from Inter-agency Coordination Lebanon (2020).

Across the ten cities, population density roughly increases with total city population (Figure 10). The three largest cities – Tripoli, Saida and Beirut, are indeed the densest. The largest city, Beirut, however, is an outlier to this apparent trend, being only the third densest city behind Tripoli and Saida. It appears that a more densely populated capital could at least in principle be achievable within the Lebanese context. Moreover, all cities fall short of the 15,000 persons/km² sustainable urban neighbourhoods principle espoused by UN-Habitat (2016c:4) that aims to 'promote high density urban growth, alleviate urban sprawl and maximize land efficiency'.

It is notable that the most densely populated city of Tripoli is widely acknowledged to be also the most impoverished not only in Lebanon but also in the Mediterranean Basin (UN-Habitat, 2016b). A critical urban policy question for all cities but particularly for Tripoli is how to harness the potential of urban population density as a force for more sustainable development in a context of extreme poverty concentrations.

City	*Area*		*Area change*				*Population*		
	Area within city perimeter km² 2021	*Area within city perimeter with built up land cover km² 2021*	*Built up land cover as % of total area 2021*	*Area within city perimeter km² 1990*	*Change in area 1990-2021 km²*	*Change in area 1990-2021 %*	*Total population 2020*	*Population as % of national 2020*	*Pop density (persons/ km²)*
Tripoli	24.5	12.9	51.2	16.1	8.5	53	335,004	6.0	13,653
Beirut	110.6	64.6	58.4	79.9	30.7	38	1,263,332	22.6	11,427
Jounieh	10.8	6.4	59.1	5.8	5.0	87	104,161	1.9	9,635
Byblos	8.0	4.3	54.3	3.7	4.2	114	30,985	0.6	3,891
Baalbek	20.5	9.4	45.9	2.5	18.0	718	76,199	1.4	3,718
Hermel	4.7	2.8	58.4	1.3	3.4	250	29,612	0.5	6,286
Zahleh	11.6	5.0	43.2	5	6.6	132	86,149	1.5	7,284
Saida	16.0	10.4	65.1	11.4	4.6	40	195,095	3.5	12,220
Tyre	16.4	7.2	44.1	7.0	9.4	134	124,180	2.2	7,571
Nabatiyeh	11.6	5.8	49.7	2.5	9.0	357	52,966	0.9	4,575
10 cities	234.6	128.7	54.8	135.2	99.4	73.5	2,297,683	41	9,987
Lebanon	-	-	-	-	-	-	5,587,563	100	-

Table 14 Summary comparative area, area change and population statistics by city. *Source:* UN-Habitat, based on UN-Habitat Regional Office of Arab States (forthcoming), Interagency Coordination Lebanon (2021) and European Commission (2018).

Summary data on space and population

Table 14 summarizes selected space and population characteristics by city covered in the foregoing for ease of reference during reading of the subsequent sectoral sections of the report.

Concluding points

- The city boundaries have provided a spatial framework that enable comparison of cities on a like-for-like basis. The foregoing space and population analysis thus framed provides new evidence about the sub-national anatomy of urban Lebanon.
- There are vast divergences in proportional urban expansion over the last three decades between the ten selected cities in terms of their continuously built up areas – from 38.4% expansion for Beirut to 717% for Baalbek - suggesting similarly differentiated population change. The data constitutes baselines that can inform spatial and urban development policy decision-making.
- Almost 100km^2 of new built up land accrued collectively to the ten cities over 1990 to 2021, an area approaching the area of today's Beirut.
- Guiding growth towards densification, a central plank of UN-Habitat's guidance for urban sustainability, is particularly important in situations of rapid urbanization to reduce per capita land consumption and the costs of public services. There may be near-term scope for densification in the four cities that are under 50% built up (Baalbek, Zahleh, Tyre, Nabatiyeh). Identification of 'areas for intensification', such as through UoM's non-binding strategic plans, may offer an entry point towards operationalizing densification.
- The ten cities have expanded outwards both concentrically and along strips based on transport routes. Cities must take morphological change trajectories into account and formulate explicit policy choices about the preferred spatiality of their future urban growth, ideally in iterative coordination with a national spatial development framework.[43]
- The ten cities combined, which contain 41% of the national population, have a lower proportion of Non-Lebanese (27%) than the national average (31%). At city level, however, some cities approach an even split between Lebanese and Non-Lebanese (Zahleh is 47.6% Non-Lebanese; Saida is 38.7% Non-Lebanese), again highlighting the differential city baselines from a demographic perspective.
- Population projections disaggregated to city level are required for medium and long-range planning of infrastructure and services. Further research is needed into city-level population change to help identify current gaps and future needs. Further research is also required into built density change to improve understanding of urban growth formats beyond peripheral expansion, including infill and vertical densification
- The ten selected cities organically span idiosyncratic configurations of governorate, district and municipal jurisdictions; and range in size over an order of magnitude (from 11.6km^2 for both Zahleh and Nabatiyeh to 110.6km^2 for Beirut). On the premise that the city is the optimum unit for sustainable urban development, city-level deliberations about urban futures would require flexible partnerships that are locally tailored to accommodate institutional and stakeholder dynamics on the ground.



Photo in Beirut. ©UN-Habitat, 2019

43 Stylized city-level policy options for managing inexorable urban growth include:
-Laissez-faire provision of 'greenfield' land development at the urban boundary (broadly, business-as-usual associated with urban sprawl);
-Selective site or zone designations for density-controlled and serviced expansion at the urban boundary ('sustainable urban extension');
-Intra-urban densification through brownfield land and/or infill development possibly supported by a no-build 'green belt' at the periphery ('compact city');
-Expanded or new ex-urban density-controlled and serviced settlements ('leapfrog growth').

Dimensions of sustainable urban development



Photo of Baalbek. ©Ahmad Chinder, 2021

Urban governance



Photo of Zahleh, ©Ahmad Chinder, 2021

This report section characterizes the state of urban Lebanon in regard to a range of themes and sectors relevant to sustainable urban development. For each, a brief national outline prefaces city-level analysis. The impact of the ongoing compounded crises since 2019 are drawn out. Propensity for and barriers to inter-municipality collaboration within individual cities by sector are incorporated, drawing on city municipalities' questionnaire responses. In line with the 2030 Sustainable Development Agenda's human rights-based approach aiming to 'leave no one behind', human rights interfaces are highlighted. Each section ends with a set of proposed ways forward for mitigating sector barriers to sustainable development and resilience-building.

Urban governance

National

Spatial and urban governance in Lebanon as elsewhere is nested within the country's overall system of governance, meaning the sum of formal and informal arrangements for ordering society. Good governance has been characterized as a mechanism to protect human rights; it is 'the process whereby public institutions conduct public affairs, manage public resources and guarantee the realization of human rights in a manner essentially free of abuse and corruption, and with due regard for the rule of law' (OHCHR, 2021).

Lebanon has long been beset by weak and opaque governance. Shortcomings have been starkly exposed with the emergence of the multiple crises since 2019. The sluggish pace of progress on governance reforms (in parallel with fiscal, financial and social reforms) is currently deterring the flow of international aid to support recovery (World Bank, 2021).[44] A measure of government performance offers an insight: a multidimensional 'Government Effectiveness Index' measuring perceptions of the quality of public services, policy formulation and related measures[45] dropped dramatically from 46% in 2012 to 18% in 2020 (Trading Economics, 2021).

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44 For instance, a recent press release from the International Support Group for Lebanon '...urges Lebanon's leaders to move quickly ...to initiate the critical reforms...to pave the way for enhanced international support' (International Support Group for Lebanon, 2021).

45 'Government Effectiveness captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. Percentile rank indicates the country's rank among all countries covered by the aggregate indicator, with 0 corresponding to lowest rank, and 100 to highest rank.' (Trading Economics, 2021)

Government Effectiveness Index: Lebanon

18% (2020) **26%** (2019)

46% (2012)

Source: Trading Economics, 2021

Spatial and urban governance are inherently inter-scalar systems requiring intrinsically challenging vertical and horizontal coordination whereby diverse stakeholder views stand to be mediated and cooperative action taken. Therein, an urban angle onto governance highlights the need for inclusive access to the benefits of urban citizenship (UN-Habitat, 2020).

> ‘Good urban governance (...) affirms that no man, woman or child can be denied access to the necessities of urban life, including adequate shelter, security of tenure, safe water, sanitation, a clean environment, health, education and nutrition, employment and public safety and mobility (...) Urban governance is inextricably linked to the welfare of the citizenry.’
>
> *(UN-Habitat, 2020c)*

Entities with a spatial / urban planning role

A range of national and local state entities take part in spatial or urban planning in Lebanon (UN-Habitat, 2018b).

- **Directorate General of Urbanism (DGU)**

  The DGU is responsible for the development and review of masterplans across Lebanon which set an outline for land uses. Masterplans are most commonly generated at the initiative of the DGU, though may also be produced by municipalities (see below). It has been estimated that only 15% of the Lebanese territory is covered by decreed masterplans (Public Works Studio, 2018a). Remaining land is not bound to any specific land use, and is regulated by generalized building zoning stipulating lot coverage and floor-area ratio only. Moreover, masterplans are not developed or approved within an overarching coordinating spatial framework meaning in practice they can emerge in conflict regarding their developmental objectives.

- **Higher Council for Urban Planning (HCUP)**

  Headed by the Director General of Urbanism, HCUP is responsible for making recommendations that guide urban planning at a national level and is the approval body for masterplans before submission to the Council of Ministers for decree. It contains representatives from a wide range of sectoral ministries, as well as the Order of Architects and Engineers and other urban specialists.

- **Council for Development and Reconstruction (CDR)**

  Founded after the onset of the 1975-1990 Civil War in 1977 to address reconstruction, the CDR was charged with developing a National Physical Master Plan of the Lebanese Territory (NPMPLT) to regulate urbanization, which was decreed in 2009. It is the government body responsible for major public infrastructure projects and is charged with coordinating its sector based actions with relevant ministries. The CDR is mandated to operate at the national level but in practice this has also meant engagement on city- and region-specific strategies and large-scale projects. The CDR operates independently and has weak links to the DGU, reporting directly to the Council of Ministers.

- **Municipalities**

  Whilst planning in Lebanon is a highly centralized process, municipalities are the main local agents in urban planning. They are the multi-sectoral area-based managers and the day-to-day face of the state for most people. Since municipal elections were re-established post-war in Lebanon in 1998 after a 35 year hiatus, they have revived municipal life, made some progress in engaging citizens at the local level, and provided a momentum for decentralization that has been a prevalent policy focus in Lebanon since the end of the civil war and earlier. The Municipal Law provides that municipalities, like the DGU, can produce masterplans (general and detailed including parceling) in collaboration with the DGUP, and submit these for consideration to the HCUP which may then present them to the Council of Minsters for decree. In practice, however, this resource-intensive plan-making process is not within the reach of most municipalities, giving way instead to piecemeal development and projects that may not fit into a longer-term overarching vision, potentiating inefficiencies in the long run (UN-Habitat, 2013). Moreover, the small area of municipalities in Lebanon on average presents coordination challenges to strategic city-level planning for sustainable urban development, in the absence of official whole-of-city governance structures.

- **Unions of municipalities**

  UoMs, described in the 'Spatial and administrative context' above, sometimes undertake urban planning as one of a range of activities. The UoM derives any planning mandate from their voluntarily constituent municipalities, though can receive some funding from central government for strategic projects. Operating at what may be termed an upper-local level, UoM-mediated urban planning seeks to capture the shared benefits of joint working within cross-municipal spatial planning units.

  However, UoM groups are typically formed for motivations beyond spatial planning and development coordination, with local politics and manoeuvring for access to scarce resources often filtering union membership and thus spatial configuration.[46]

  It remains, though, that UoMs are stores of accumulated experience and expertise on inter-municipal collaboration of the sort required to mobilize strategic, integrated area-based approaches, including at the city scale. The government has in the past supported the production of regional strategic urban plans through UoMs (CDR, 2016), though these are non-binding in nature. Despite the role that some UoMs undertake in the preparation of joint development plans on behalf of their constituent municipalities, a 2017 review of UoMs found only two instances where specific planning committees had been institutionalized (DRI, 2017:16).

National framework for spatial / urban planning

Conspicuously absent from the above list is a central institutionalized public entity that guides and integrates - horizontally and vertically - the spatial aspects of urban service delivery implemented through sector ministries (eg Ministry of Energy and Water; Ministry of Public Works and Transport; Ministry of Environment, Ministry of Culture). Such a body, a Ministry of Planning,[47] was established in 1963, dissolved as the 1975-1990 Civil War started and was replaced by a Council for Development and Reconstruction (CDR) that still exists today in post-war times. Whilst urban services are incorporated in decreed master plans, sector ministries also have their own geographic planning perimeters and policies with outcomes on the ground that do not reliably align to local master plans and in practice can override them (UN-Habitat, 2013:36).

> '(T)own planning is … the outcome of sectoral policies whose incoherencies are (…) felt by experts and residents alike' *(UN-Habitat, 2013:34).*

In Lebanon, urban policy is not a recognized public policy area (UN-Habitat, 2018b), with no law pertaining specifically to urban areas. A range of texts do however relate to urban settings (UN-Habitat, 2018), including the CDR-led NPMPLT (DAR-IAURIF, 2005; decreed 2009).

The criticality of a national development framework is internationally recognized, indeed, the existence of one is an SDG target in its own right, notwithstanding severe limitations on implementation in Lebanon's case.

11 SUSTAINABLE CITIES AND COMMUNITIES

Target 11.A National and regional development planning

Indicator 11:A:01 - Countries that have national urban policies or regional development plans that respond to population dynamics; ensure balanced territorial development; and increase local fiscal space



Yes (2009 onwards)

Source: Lebanon SDG Monitor (ESCWA, 2021b)

Lebanon's NPMPLT (DAR-IAURIF, 2005, decreed 2009) was designed to support the balanced development of the Lebanese territories, reflecting the Lebanese Constitution's (Government of Lebanon, 1926 as amended, most recently 1990) statement in 'Preamble G' that 'The balanced development among regions on the cultural, social, and economic levels shall be a basic pillar of the unity of the state and the stability of the system'.[48] The NPMPLT was a remarkable achievement in terms of its genuine effort to offer a multi-sectorally integrated lens; its bold urban growth projections over a 25 year time horizon for the main cities; and its broad-brush geographically referenced prescriptions to a granularity level consistent with a national framework document. Urban expansion anticipated to 2030 in the NPMPLT – expected at 2005 to reach 30,000ha - was derived from a conflated mix[49] of in-trend projections by city continuing from historic growth on one hand and, on the other, the imposition of

46 Some UoMs thus end up as geographically non-coterminous units, a situation sub-optimal for most aspects of territorial planning.

47 'The Ministry of Planning (…) aimed at providing five-year plans that articulate(d) all the ministries' actions in coordination with different ministries' (UN-Habitat, 2019).

48 Centralization of growth and development around primate cities is common internationally; national governments across the world as well as regional entities like the EU have sought mechanisms to decentralize in the name of balanced territorial development.

49 The relative weight given to trend-based projections and policy objectives in the spatial allocation of anticipated additional urban land to 2030 is not specified in the NPMPLT.

the trend-modifying policy objective – particularly 'the will to alleviate the urban pressure exerted on coastal areas, in favor of a more controlled development of interior large agglomerations...' (DAR-IAURIF, 2005: pp II-24 of 34). Projected urban growth figures for the urban hierarchy proposed in the NPMPLT are shown in Table 15.

Geographical areas identified in NPMPLT - boundaries not available	*Allocation of total 30,000ha additional urban land 2005-2030*	
	ha	*%*
Central Urban Area (Greater Beirut and surrounding agglomerations)	*5,500*	*18.3*
Agglomeration of Tripoli	*1,800*	6
Other large agglomerations in the country (Baalbek, Zahleh-Chtaura, Nabatiyeh, Saida, Tyre, Jbayl)	600-1,000 each (3,600-6,000 total)	12-20
Other cities and villages (>1,000 no.)	1.2-1.5 each (12,000-15,000 total)	40-50

Table 15 Spatial distribution of total 30,000ha (300km^2) additional urban land cover to 2030 as at 2005. *Source:* Derived from figures in National Physical Master Plan of the Lebanese Territory (Dar and IAURIF, 2005).

The NPMPLT has since languished unimplemented. A review of legislation ('Decree No 2366 of 2009 defining the Comprehensive Plan for Lebanese Territory Arrangement' (Article 10)) concerned with operationalizing the NPMPLT specifies that the HCUP president should form a committee to follow up on its implementation (Public Works Studio, 2018a); this critical step remains unactioned. A review of 42 general and detailed masterplans ratified and 69 amended between 2009 and 2018 found that only five mentioned the NPMPLT (Ibid).

Inclusiveness of urban planning governance

Governance of cities is embedded within a much wider national system. The national level in Lebanon features communitarian power-sharing with priorities varying according to the communitarian distribution of interests across ministries and government agencies. It is also characterized by a dominant neoliberal political economy that has tended to privilege themes like real estate and construction, commercial finance, direct investment and remittances over local and inclusionary visioning or related participative practices.

Inclusionary governance: Women in political life

Women's political representation is low: the Inter-Parliamentary Union logged that only 4.7% of 128 parliamentarians are women (IPU, 2021). In terms of female political empowerment, a Global Gender Gap Report scored Lebanon poorly at 112th out of 156 countries (World Economic Forum, 2021). At municipal level, a UN-Habitat review in October 2021 for the current report of the national municipality mayor list (MOIM, 2021) covering the 69 municipalities in the 10 cities analyzed showed that only one mayor is female.[50]

Turning to governance of urban issues specifically, planning in Lebanon is highly centralized - common to many Middle Eastern countries (UN-Habitat, 2020e: 222).

> 'Inclusive urbanization seeks to address issues in access to urban services and the equitability of the urban socio-economic structure through ensuring that all participants have access to the same level of services and opportunities as each other.' *(Lemaire and Kerr, 2017).*

Decreed master plans – for the 15% minority of territory for which they exist (Public Works Studio, 2018a) - are mostly instigated and developed by central rather than local government; local governments are engaged as advisory statutory consultees only (UN-Habitat, 2020e: 222). The statutory requirement to consult municipalities cannot in Lebanon be considered a participatory measure because municipality representatives are not elected by the people living in the municipality per se (Public Works Studio, 2018b) but by people with an ancestral link to the area whether they live there or not. The inability of a portion of residents in any given area to vote there means that the form of democracy fails to represent local issues. Inclusive urban governance would at least require that people are allowed to vote in their place of residence, thereby linking them to elected representatives responsible for managing the spaces they inhabit (Fawaz, 2017).

Regarding public engagement, the Urban Planning Law[51] does not make reference to the principle of participation at all, or of informing the public about physical planning (Yazigi and Lamy, 2010).

50 Mayor of Majdalya-Zgharta Municipality, Tripoli.

51 Law on Urban Planning Nr. 69 on 9/9/1983 and amendments

In Lebanon, informal settlements and official Palestinian camps not serviced by local municipalities constitute some of the country's area-based marginalized communities. Inclusive governance of urbanization would require that such disadvantaged groups who live outside the enjoyment of formal rights to the city – such as rights to land or work or a vote - are brought into the decision-making process. For those in informal settlements and camps, routes towards inclusion are highly contentious contentious with deliberations remaining largely in the realm of CSO activism and research deliberations.

Outside of an institutionalized enabling framework for stakeholder engagement, public participation in urban development plans and projects has been spearheaded by donor initiatives where it has been set as a condition of the funding. The use of digital technologies in enabling participation in urban decision-making is one such instance[52]. A wide range of civil society organizations are actively engaged in land use and urban planning matters in Lebanon; however, these are largely lobbying from outside the statutory planning decision-making system rather than mobilizing their advocacy through formally established participatory channels (Fawaz, 2017). It has been observed elsewhere that in Lebanon 'activism has become an alternative to formal participation' (UN-Habitat, 2021a:48).

Participatory rights in development policies and urbanization

'Participatory rights' are enshrined in the Universal Declaration of Human Rights. OHCHR advocates that 'Development policies and urbanization processes are more likely to be transformative, sustainable, inclusive and equitable if they are the result of a participatory process' (OHCHR, 2016a). SDG 16.7 seeks to 'ensure responsive, inclusive, participatory and representative decision-making at all levels', with lack of participation in decision-making recognized as a cause of poverty and not only a consequence. OHCHR (2016a) highlights that 'in order to promote civic engagement in urbanization processes:

- All inhabitants should be entitled to free, active and meaningful participation – particularly individuals and groups in situations of vulnerability.
- Wide consultation and participation should take place involving all inhabitants – not only the richest and the most powerful – at all stages of the decision-making process.
- Barriers to participation should be addressed, including factors such as illiteracy, language barriers, and poverty.
- Consultation and participation should be institutionalized in both law and in practice.
- Decision-making processes need to be transparent, with information provided in a timely, accessible and understandable manner, and authorities should be held accountable for ensuring civic participation, and for allowing their decisions to be subject to public scrutiny.
- People should have access to appropriate fora through which to express their views, in addition to having access to legal ways in which to express their views and opinions (such as the right to vote).
- Free and fair dispute and complaint mechanisms both formal and informal, should be made available to all.'

City-level

Unions of municipalities

The foregoing has outlined the premise that UoMs are repositories of experience in inter-municipal collaboration; and that this institutional capacity is critical for conducting strategic city planning. A desk review of the unionization status of the municipalities making up each city (also see Figure 4) found:

- All ten selected cities in the current report are fully or partially contained within one or more UoMs.
- For four cities, all their respective municipalities are within – and form a smaller part of – one single UoM (Jounieh, Saida, Tyre, Hermel). A fifth city, Zahleh, may also fit in this category with the caveat that Ksara Municipality, enclaved in Zahleh Municipality, is not a UoM member in its own right.
- For two cities, their respective municipalities comprise members of multiple UoMs and include some municipalities not in a UoM at all (Tripoli, Beirut).
- For three cities, their municipalities are partly within one single UoM and include some municipalities not in a UoM at all (Byblos, Nabatiyeh, Baalbek).

To summarize, all the main cities are already engaged in institutionalized inter-municipality collaboration at least to the extent required to form municipal unions, clearly signaling recognition of the need for municipal cooperation. At the same time, the spatial configuration of unions seems designed to support geographical integration at scales wider than the urban area. Whilst there are no doubt locally contingent rationales for the various configurations, a city-specific institutional vacuum remains, limiting ability to coordinate sustainable urban development and to interface with national spatial and urban policy debates. Cities with footprints

52 UN-Habitat has piloted in Lebanon the use of the video game Minecraft as a community participation tool to consult youth on aspirations for urban public spaces.

fully contained within one single UoM may present an institutional set-up that is more conducive to considering urban-level strategizing compared to cities with footprints spanning multiple unions. An updated mapping of UoMs which have specific planning committees[53] may also provide signposts to help deliberations about filling the city-specific coordination vacuum.

Dimensions of sustainable urban development		Tripoli	Beirut	Jounieh	Byblos	Zahleh	Hermel	Baalbek	Tyre	Nabatiyeh
Urban governance	Spatial/urban development policy-making	Collaboration	Non-systematic	No collaboration	Collaboration	No collaboration	No collaboration	Non-systematic	Collaboration	No collaboration
	Spatial/urban development project planning	Collaboration	Non-systematic	No collaboration	Collaboration	No collaboration	No collaboration	Non-systematic	Collaboration	Weak
	Municipal public spending decision-making	Collaboration	No collaboration	No collaboration	Non-systematic	Collaboration	Collaboration	No collaboration	Non-systematic	Non-systematic
	Institutional capacity building of state entities	No collaboration	No collaboration	No collaboration	Collaboration	No collaboration	Collaboration	Collaboration	No collaboration	Non-systematic
	Institutional capacity building of non-state entities [CSOs]	Collaboration	No collaboration	No collaboration	No collaboration	Weak	Collaboration	Collaboration	Non-systematic	No collaboration
	Community engagement in public decision-making	Weak	Collaboration	No collaboration	Collaboration	Collaboration	Collaboration	Collaboration	No collaboration	Collaboration
Economy and livelihoods	Economic development	No collaboration	No collaboration	Weak	Collaboration	No collaboration	Collaboration	Non-systematic	Weak	No collaboration
	Labour and employment	Weak	No collaboration	Weak	Collaboration	No collaboration	Collaboration	No collaboration	Weak	Non-systematic
	Poverty mitigation	Weak	No collaboration	Weak	Collaboration	No collaboration	Collaboration	No collaboration	Weak	Weak
	Women in the economy	Collaboration	No collaboration	Non-systematic	Weak	No collaboration	Collaboration	Non-systematic	Weak	Non-systematic
Infrastructure and services	Water supply	Collaboration	Collaboration	No collaboration	Collaboration	No collaboration	Collaboration	Collaboration	Collaboration	No collaboration
	Sewage / wastewater management	Collaboration	Collaboration	Collaboration	Collaboration	No collaboration	No collaboration	Collaboration	Collaboration	Weak
	Solid waste management	Collaboration	No collaboration	No collaboration	Collaboration	Non-systematic	No collaboration	Collaboration	Collaboration	No collaboration
	Technology and innovation	No collaboration	No collaboration	No collaboration	Collaboration	No collaboration	Weak	No collaboration	No collaboration	No collaboration
	Urban mobility / transport	No collaboration	Collaboration	Non-systematic	Collaboration	No collaboration	Weak	No collaboration	No collaboration	No collaboration
	Public space	No collaboration	No collaboration	Non-systematic	Collaboration	No collaboration	Collaboration	No collaboration	Collaboration	Weak
	Health	No collaboration	Collaboration	Non-systematic	Collaboration	No collaboration	No collaboration	No collaboration	Collaboration	Weak
Society	Safety and security	No collaboration	No collaboration	Collaboration	Collaboration	No collaboration	Collaboration	Collaboration	No collaboration	No collaboration
	Human rights and inclusion	No collaboration	No collaboration	Non-systematic	Collaboration	No collaboration	Collaboration	Non-systematic	Collaboration	Weak
Heritage and culture	Conservation /preservation of built urban heritage	No collaboration	No collaboration	Collaboration	Collaboration	No collaboration	Collaboration	Non-systematic	Non-systematic	Non-systematic
	Cultural heritage and tourism promotion	No collaboration	No collaboration	Collaboration	Collaboration	No collaboration	Collaboration	No collaboration	Collaboration	Non-systematic
Environmental sustainability	Air quality	Collaboration	No collaboration	No collaboration	Collaboration	No collaboration	Collaboration	Non-systematic	No collaboration	No feedback
	Water pollution	No collaboration	No collaboration	No collaboration	Non-systematic	No collaboration	Collaboration	Non-systematic	Collaboration	Non-systematic
	Urban expansion into natural ecosystems	No collaboration	No collaboration	No collaboration	No collaboration	No collaboration	No collaboration	Collaboration	No collaboration	No collaboration

Legend

- Collaboration between municipalities or unions within the city
- Non-systematic or limited collaboration (based on projects) between municipalities or unions within the city
- Weak to very weak collaboration between municipalities or unions within the city
- No collaboration between municipalities or unions within the city
- No feedback

Table 16 City municipalities' responses to question: 'In what sector(s) do municipalities already work together collaboratively? Which sector(s) not currently worked on collaboratively do you consider most urgent to work on collaboratively?' *Source:* UN-Habitat, Aug-Sep 2021.

53 Similar to that undertaken by DRI (2017) as mentioned in the foregoing.



Photo in Beirut. ©UN-Habitat, 2019

City municipalities group discussion

?

Inter-municipality collaboration on governance?

For each city, respective municipalities were grouped into a consultation meeting. Municipalities were asked: 'In what sector(s) do municipalities in this city already work together collaboratively?' (Table 16).

Four cities (Tripoli, Beirut, Byblos, Tyre) reported collaboration on **spatial/urban development policy-making** and/or **project planning**. Beirut considered spatial/urban development policy-making (along with municipal spending decision-making) as a priority for establishing inter-municipality collaboration.

- However, four cities reported no or minimal collaboration between their respective municipalities on these activities (Jounieh, Zahleh, Hermel, Nabatiyeh).
- In terms of **community engagement in public decision-making**, respondents for four cities (Tripoli, Beirut, Byblos, Baalbek and Nabatiyeh) reported the existence of inter-municipal collaboration.
- Four cities reported ongoing inter-municipality collaboration on **institutional capacity-building of non-state entities** (Tripoli, Hermel, Baalbek; and to a lesser degree Zahleh). During discussion, Byblos – the city reporting the most thematically comprehensive inter-municipal collaboration of all selected cities - considered **this theme** a future priority for collaborative work.
- Jounieh reported no collaboration between municipalities on **urban governance** generally. This is despite all of Jounieh's three municipalities being part of one 54-municipality union (UoM Kesrouane El Ftouh). Whilst unionization may present an institutional structure geared towards supra-municipal strategizing it does not automatically lead to inter-municipal collaboration, suggesting scope for capacity-building measures tailored to improving municipal engagement horizontally across their unions.
- Zahleh as a small two-municipality city reported that its development vision is framed at the municipal rather than wider union level, its limited engagement in municipal collaboration across the governance and other sectors may be considered in that light.

> 'The Jbeil-Blat collaboration serves as a model for other municipalities in Lebanon on the significance of coordination between adjacent municipalities.'
>
> *Mayor of Jbeil Municipality*
>
> *State of the Lebanese Cities: City municipalities consultation meeting for Byblos City, 2021.*

Beirut highlighted that any given municipality cannot interfere with the mandate of other municipalities without prior agreement. Beirut also noted that the role of the Minister of the Interior and Municipalities (MoIM) in grouping municipalities together around urban infrastructure and service needs could be stronger given that pooling funds between municipalities can help deliver on projects not possible for municipalities to fund unilaterally; concluding that 'municipalities cannot take the role of the state'.

A number of cities noted that low municipality budgets were stifling potential for collaboration, with municipalities at the urban centre supporting other peripheral

municipalities in such coordination due to the higher budget of the former (Tyre); and another highlighted that the municipal scope of work is officially more limited than that which is expected in practice, particularly in terms of security (Nabatiyeh).

The lack of an urban boundary was identified as presenting a coordination challenge. Reaching a shared understanding of the city footprint could help frame more efficient collaboration efforts.

Overall, cities variously reported that that inter-municipal coordination arises reactively according to need (such as on firefighting or COVID-19 as reported by Jounieh), where there is shared benefit (Byblos) and generally driven by geographical proximity (Tyre); and that inter-municipal coordination has taken place at the data collection stage (Jounieh) or project planning stage but less so at implementation phase (Tripoli). Nabatiyeh particularly reported using the union of which it is part as a conduit for coordination on cross-municipality projects. Beirut reported that its municipality runs a multi-municipality committee to coordinate and strategize on projects.

City municipalities group discussion

Capacity barriers to achieving city visions?

For each city, municipalities were asked:
"What are the main capacity-related barriers faced that limit your city's ability to achieve its future vision?' (Table 17). The purpose was to offer initial perspectives on potential capacity-building approaches that may improve the ability of city municipalities to realize sustainable urban futures.

Capacity-related barriers/challenges	Tripoli	Beirut	Jounieh	Byblos	Zahleh	Hermel	Baalbek	Tyre	Nabatiyeh
Staff numbers in municipalities	No feedback	Partial barrier/challenge	Partial barrier/challenge	Barrier/challenge	Partial barrier/challenge	Not a barrier/challenge	Partial barrier/challenge	Not a barrier/challenge	Not a barrier/challenge
Technical skills of staff in municipalities	No feedback	Partial barrier/challenge	Partial barrier/challenge	Barrier/challenge	Partial barrier/challenge	Not a barrier/challenge	Partial barrier/challenge	Not a barrier/challenge	Partial barrier/challenge
Staff numbers dedicated to union	Barrier/challenge	Barrier/challenge	Barrier/challenge	Barrier/challenge	Barrier/challenge	No feedback	Partial barrier/challenge	Not a barrier/challenge	Barrier/challenge
Technical skills of staff dedicated to union	Not a barrier/challenge	Not a barrier/challenge	Partial barrier/challenge	Not a barrier/challenge	Not a barrier/challenge	No feedback	Partial barrier/challenge	Not a barrier/challenge	Barrier/challenge
Inadequate or absent diagnostic baseline of information on city status & needs	Barrier/challenge	Barrier/challenge	Partial barrier/challenge	Barrier/challenge	Partial barrier/challenge	Not a barrier/challenge	Not a barrier/challenge	Barrier/challenge	Partial barrier/challenge
Funding availability	Barrier/challenge	Barrier/challenge	Barrier/challenge	Barrier/challenge	Barrier/challenge	Barrier/challenge	Barrier/challenge	Barrier/challenge	Barrier/challenge
Lack of financial autonomy from central government	Barrier/challenge	Barrier/challenge	Partial barrier/challenge	Barrier/challenge	Barrier/challenge	Barrier/challenge	Partial barrier/challenge	Barrier/challenge	Partial barrier/challenge
Lack of decision-making autonomy from central government	Barrier/challenge	Barrier/challenge	Barrier/challenge	Partial barrier/challenge	Barrier/challenge	Barrier/challenge	Partial barrier/challenge	Barrier/challenge	Partial barrier/challenge
Absence of sustainable development strategy for the city	Barrier/challenge	Not a barrier/challenge	Partial barrier/challenge	Partial barrier/challenge	Not a barrier/challenge	Barrier/challenge	Partial barrier/challenge	Barrier/challenge	Barrier/challenge
Inability to implement existing sustainable development strategy for the city	No feedback	Barrier/challenge	Barrier/challenge	Barrier/challenge	Barrier/challenge	Barrier/challenge	Partial barrier/challenge	Barrier/challenge	Barrier/challenge
Inability of municipalities across the city to collaborate on strategic planning	No feedback	Barrier/challenge	Partial barrier/challenge	Partial barrier/challenge	Partial barrier/challenge	Partial barrier/challenge	Barrier/challenge	Barrier/challenge	Not a barrier/challenge
Lack of political will / support	Not a barrier/challenge	Barrier/challenge	Barrier/challenge	Barrier/challenge	Barrier/challenge	Barrier/challenge	Partial barrier/challenge	Barrier/challenge	Not a barrier/challenge
Competing short term / urgent priorities	Barrier/challenge	Barrier/challenge	Barrier/challenge	Barrier/challenge	Barrier/challenge	Barrier/challenge	Partial barrier/challenge	Barrier/challenge	Not a barrier/challenge
Lack of disaster risk management preparedness	Not a barrier/challenge	Partial barrier/challenge	Barrier/challenge	Partial barrier/challenge	Not a barrier/challenge	Barrier/challenge	Not a barrier/challenge	Barrier/challenge	Barrier/challenge

Legend
Barrier/challenge | Partial barrier/challenge | Not a barrier/challenge | No feedback

Table 17 City municipalities' responses to question: 'What are the main capacity-related barriers faced that limit your city's ability to achieve its future vision?'. *Source:* UN-Habitat, Aug-Sep 2021.

Across the categories, **'funding availability'** was a unanimously-cited capacity barrier.

- Lack of **financial autonomy** and **decision-making autonomy** were also unanimously cited (although as weak barriers in some cases).
  - Tripoli noted the existence of a number of studies 'awaiting implementation';
  - Zahleh noted its draft masterplan having been presented to CDR and awaiting decree;
  - Nabatiyeh noted the existence of a 2022 strategic vision and around 35 drafted projects awaiting funding;
  - The challenge to implementing planned projects presented by the post-2019 currency devaluation was raised in that context.
- Other commonly cited barriers were 'Inability to implement existing sustainable development strategy for the city' (seven cities; also identified as a partial barrier for an eighth); and 'Staff dedicated to the union', noted by six cities. 'Competing short-term or urgent priorities' and 'Lack of political will' were cited by seven and six cities respectively.
- Notably, technical skills were not perceived to be among the largest barriers: **technical skills of union staff and technical skills of municipal staff** scored only weakly or negatively as barriers.

To summarize, the prevalence of existing yet unimplemented sustainable development strategies against a backdrop of perceived funding challenges and autonomy barriers suggests that traditional capacity-building remedial actions such as skills-building and sustainability awareness-raising may have limited impact without fundamental changes to the financing and decision-making environment of municipalities in the city development processes. The findings points to the need for new models which radically enhance urban-level financial and decision-making powers.

Ways forward

- Urban governance in Lebanon is characterized by a hollowed out institutional structure with a centralized planning system, a fragmenting local tier and no meso-level framework for city management. This is a particularly critical matter in a country as highly dependent on its cities in terms of economy, population concentrations and beyond.
  - At national level, urgent consideration is required to re-instituting a public entity for coordinating the spatial dimensions of other ministries' activities. In policy terms, it must be recognized that the only route to balanced territorial development across the Lebanese territories of the type committed to in Lebanon's Constitution is through a national-level spatial development framework. The decreed NPMPLT of 2009 offers a framework ripe for updating or rewriting – in either case, it provides a valuable demonstration model of what is possible. Attention to initiating the legislatively-backed committee[54] under HCUP to consider the operationalization and development of the NPMPLT seems a starting point. Initial committee matters may include mechanisms to achieve general conformity between local and national levels; and baseline study updates of the sort underpinning the original NPMPLT. National policy-making thereafter must be formulating in a way that accommodates policy continuity over government administration cycles. A high quality, inclusive stakeholder participation process that offers meaningful engagement to municipalities and a wide range of other stakeholders would support this aim by fostering a broad-based ownership of the outcome. Such a process would also build valuable local capital to be called on subsequently in the delicate but necessary process of aligning the contents of pre-existing local and new national land use plans.
  - At subnational level, cities are the natural development unit for measuring and taking measures towards sustainable urban development. This report has highlighted that Lebanon's cities have been expanding precisely as its municipalities have been fragmenting. It has also shown that UoMs as entities encouraged to undertaken cross-municipality strategic activities are not spatially configured to urban footprints. At a time when internal and external pressure to generate urban/rural boundaries is rightly mounting and to which the government is responding, the initial question of urban governance in Lebanon then should be recognized as one of the ability and propensity of city-specific municipalities to work together. Consensus-building and joint working may stand in tension with self-interest, competition and rivalry riven with territorial politics (Kim, 2020). Politically tense environments such as Lebanon are likely to show heightened stakes. A first step is to reach a consensus on city boundaries from a technically and methodologically neutral angle, and ideally through an official government initiative of the type underway via CAS currently. In the interim, this report offers a working insight into how boundaries may be used to frame analysis of cities. A mapping of the stakeholders in the new 'whole of city' geography is a starting point for collaboration and participation. The municipalities, UoMs and city stakeholders may then consider mobilizing soft (ie non-statutory) 'city partnerships' to focus on issues where an urban lens adds value. Such partnerships or alliances should be conceptualized in consultation with city municipalities and their UoMs, taking account of the incumbent institutions at local level including

54 Decree No 2366 of 2009 defining the Comprehensive Plan for Lebanese Territory Arrangement' (Article 10)

UoMs as valuable repositories of experience in inter-municipal collaboration. Creative approaches to financial and in-kind resourcing that may draw inspiration from the funding relationships between municipalities, UoMs and donors stand to be explored. Attention to those UoMs with established planning committees and/or which have produced strategic plans could identify insights into scaleable techniques and approaches for application at the city level. Regarding the policy content of city plans, urban growth trajectory and population figures will be key data inputs into designing contextually responsive policies with the potential to foster efficient, compacted and connected cities.

- Good urban governance has been framed as a way to ensure inclusive access to the benefits of urban life and a mechanism to protect human rights through supporting access to shelter, water, food, safety and more - ever more urgent in the current compound crises facing Lebanon. Public participation in urban planning, currently absent, stands to be institutionalized at the legislative level to create an enabling environment for transparent and accountable decision-making in Lebanon. The creation of formal channels through which stakeholder voices are heard should be envisioned. Participation innovations linked to urban planning and projects leveraged by donors as a funding condition stand to be researched to identify locally resonant good practices that may be mainstreamed. The right to participation is severely eroded in Lebanon by the commonplace lack of access to voting rights in the place of one's residence. This stands to be addressed to improve the accountability and quality of decision-making across a range of public policy areas including those related to urbanity.
- The current study has suggested that the limiting factor in terms of implementing sustainable development strategies in cities is not awareness of need or technical capacity but simply financial resources coupled with decision-making autonomy. An increase in municipalities' fiscal and administrative space may improve the ability of municipalities to respond to the demands of inter-municipality collaboration at the city level. The design of municipal capacity-building interventions may draw on this and related nuances identified through the municipalities questionnaire survey detailed herein.
- The decentralization agenda in Lebanon needs to be explicitly linked to the needs of cities if it is to facilitate sustainable development in such a highly urban country. An urban bias to the governance rescaling deliberations is thus highly recommended.



Photo in Saida. ©UN-Habitat, 2017



Photo of Tyre. ©Ahmad Chinder, 2021

Municipal finance

Both the 2030 Agenda for Sustainable Development (UN, 2015) and the New Urban Agenda (NUA) (UN-Habitat, 2017a) recognize the role of cities in achieving sustainable development. The NUA advocates for 'supporting effective, innovative and sustainable financing frameworks and instruments enabling strengthened municipal finance and local fiscal systems to create, sustain and share the value generated by sustainable urban development in an inclusive manner' (UN, 2017a: 8). In a statement on municipal finance and human rights, OHCHR advocates that 'National and local authorities are responsible for allocating the maximum available resources for the realization of human rights (OHCHR, 2016b), highlighting that urban financing should be participatory, transparent and accountable with - where present - public-private partnerships regulated to safeguard human rights.

Implementation of these agendas, signed by national governments, at subnational level, however, continues to require a process of localization. In principle, allocation and spending of financial resources is to be balanced across the 17 SDGs at national and local levels. This demands integrated multi-level governance with clear responsibilities and lines of communication, as formulated in the terms of SDG16 which advocates for 'building effective, accountable, and inclusive institutions at all levels'. Focusing on cities, member states had committed through the NUA (UN-Habitat, 2017a) to working towards 'strengthening urban governance with sound institutions and mechanisms' and 'supporting effective innovative and sustainable financing frameworks and instruments enabling strengthened municipal finance and local fiscal systems'. The need for a strong municipal finance system was highlighted throughout the NUA as a requirement for SDG implementation. This section summarizes the municipal finance system of Lebanese municipalities and its implications for their abilities to become safe, resilient, and sustainable cities in the terms of SDG 11.

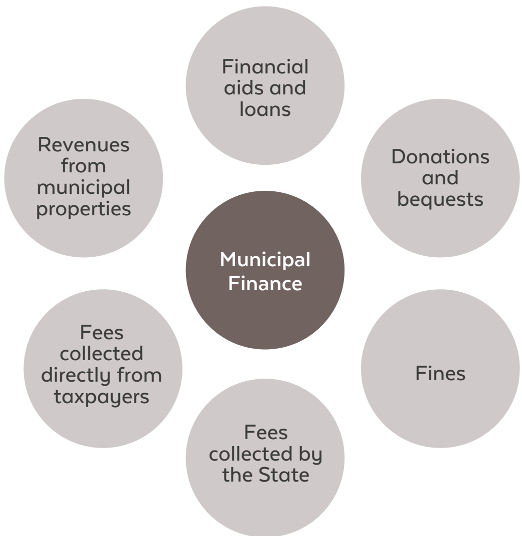


Figure 11 Main sources of municipal finance in Lebanon. *Source:* Adapted from Mourad Mourad and Al-Siddiq (2018).

National

Lebanon's 1997 Municipal Law (Article 86) outlines the range of sources of finance to municipalities, including fees levied and collected by the municipalities themselves (such as building permit fees, rental fees; taxes on built properties, municipal police fines); fees collected by non-municipal entities and returned directly to the municipalities; fees collected by the government on behalf of the municipalities, aggregated in an 'Independent Municipal Fund' (IMF) from which money is then redistributed back to municipalities and UoMs;[55] and more. Sources[56] are summarized in Figure 11.

In practice, municipalities rely largely on funds allocated from the IMF (around 70% of municipal finance), which is under the control of MoIM. IMF income is drawn from public service providers including water, power and telecommunications, collected by the government on behalf of municipalities. A specific formula is then used to allocate IMF funds back to municipalities based on factors including municipalities' officially registered population and annual fees collected in each municipality over the previous period. Local government dependence on inter-governmental transfers is common internationally (UN-Habitat, 2009:8), typically aiming to address the imbalance between revenues available to municipalities and their expenditure responsibilities among other objectives. However, in Lebanon, the IMF allocation has been beset by delays, lack of clarity on the allocation formula (Atallah, 2011) and therefore unpredictability in transfer values to municipalities. This curtails the efficiency of public spending planning and ultimately undermines community wellbeing – a limitation that becomes increasingly important exactly as available revenues dwindle due to the current economic situation in the country. Lebanon's 1977 Municipal Act (article 49) states that any work having a public character or utility within the area of the municipality falls under the jurisdiction of the municipal council. However, most municipalities have not been able to provide the services assigned to them by law nor undertake development projects in support of communities and local development (LCPS, 2012) as they are constrained structurally, fiscally and – being subject to oversight by several authorities[57] – administratively also.

Critically, the IMF allocation formula for municipalities has not been adapted to account for the expanded pressures on host municipalities following the 2011 Syria crisis and influx of 1.5m refugees. Further, the gap between registered population for IMF allocation purposes and actual resident population requiring services tends to be greater in cities as attractors of domestic and international in-migration relative to rural areas.

> 'The state, by law, provides municipalities with a budget relevant to their population registered for election, not the residing population. This is pertinent to all main cities in Lebanon hosting internally relocated Lebanese residents as well as displaced non-Lebanese persons.'
>
> *Mayor of Baalbek Municipality*
> *State of the Lebanese Cities: City municipalities consultation meeting for Baalbek City, 2021.*

Mourad and Al-Siddiq (2018) identified more than one approach in Lebanon to channeling funds from the IMF to the UoM – sometimes directly from the state and sometimes via its member municipalities. This ambiguity stands to be clarified in the interests of transparency and ultimately of supporting inter-municipality strategic initiatives of the type taken on by UoMs.

A number of international assistance initiatives over the last decade have sought to catalyze systemic improvements in local service delivery through innovative approaches to supporting municipal finance. This has included efforts focused on strengthening revenue collection and budget efficiency against a general backdrop of low tax collection rates and arguably excessive exemptions. Currently, the ongoing deterioration in the economic and financial situation in the country is meaning that municipalities and UoMs are increasingly looking to external donors to support

55 The IMF resources are divided between municipalities and municipal unions, split 88% and 12% respectively as of 2015 (Mourad and Siddiq, 2018:51).

56 Municipal finances are derived from 1) Fees collected by the municipality directly from taxpayers, levied and collected directly at local level. 2) Fees collected by the state, independent authorities or public institutions on behalf of the municipalities and distributed directly to each municipality 3) Fees collected by the state on behalf of all municipalities and deposited into the Independent Municipal Fund (IMF).4 Financial aids, allocated by the state or public institutions to municipalities for executing major projects / providing public services. Allocation is subject to the mechanism of distribution of IMF revenues ie according to the municipality's registered population and the direct revenues collected during the two previous years. 5) Loans: Municipalities may contract loans to achieve certain projects. The municipal council's decision, in this case, requires MOIM ratification. 6) Revenues from municipal properties generated through investments in municipal properties / common lands that are managed, leased or invested by the municipality on behalf of all the native residents. 7) Fines: Court fines resulting from violations of construction, traffic, public health or any other municipal regulations, allocated to the fund of the municipality within which the violation occurred. 8) Donations and bequests/estates, including all amounts paid to municipalities or allocated to them in the form of donation or estate (paraphrased from Mourad and Al-Siddiq, 2018: 39).

57 Municipal oversight includes that from: MOIM, Court of Audit, Civil Service Board, General Directorate of Urbanism at the Ministry of Public Works, and Ministry of Finance.



Photo of Zahleh. ©Ahmad Chinder, 2021

service delivery (see DRI, 2020:1), suggesting that capacity-building of municipalities and their UoMs in attracting and administering such funding has become an increasingly important focus (UNDP and UN-Habitat, 2021).

Ways forward

Municipal infrastructure is essential to the economic, social and environmental health of cities (UN-Habitat, 2009: 41). A number of points emerge from the foregoing:

- The IMF budget allocation to municipalities needs to be administered with greater clarity about its distribution criteria and thus accountability; and with timeliness. For a given municipal budget, impact stands to be optimized where it has been possible for municipalities to plan ahead for cost-incurring activities and equipment with certainty. The mechanism for IMF transfers to UoMs may benefit from standardization.
- A particular and well-known source of bias in the budget allocation is its blindness to the pressure on municipal services exerted by people who are not registered in a given municipal jurisdiction. This mismatch, which disproportionately affects urban communities, is symptomatic of complex issues spanning voting rights reforms, lack of national population data, and the long-term policy approach to rights afforded to non-Lebanese nationals. This suite of recognized issues may find traction as part of the overall governance reforms which Lebanon's administration is currently under pressure to advance to unlock international assistance.
- The system for locally levied and collected taxes and fees stands to be reviewed to move closer towards self-sufficiency of municipal services, including by improving the percentage of taxes due that are actually collected; and possibly by revisiting the range of tax exemption scenarios.
- Also related to progressing towards financial self-sufficiency, further efforts may be targeted towards building the technical and legal capacities of municipalities to establish fair partnerships with the private sector as well as diversifying their sources of income such as through improved exploitation of municipal real estate/assets in the public interest.
- In the current economic and fiscal climate, the valuable gap-filling role of donors in municipal finance should increasingly prioritize interventions that incorporate a component of capacity-building, potentially feeding into wider donor-to-donor and donor-to-government advocacy for municipal finance reform.

Economy and livelihoods



Photo of Byblos. ©Ahmad Chinder, 2021

Macroeconomic context

Lebanon is in the midst of a dire economic depression described by the World Bank as possibly among the top three most severe crisis episodes globally since the mid-nineteenth century, characterized by a GDP drop from $55b in 2018 to $33b in 2020 and a per capita GDP contraction of 40% - a magnitude usually associated with wars (World Bank, 2021). This is the result of longstanding structural failings seeing a debt-to-GDP ratio exceeding 150%[58] by 2018 (Trading Economics, 2021) and the impacts of domestic and regional instability since 2011 and before; compounded by a series of shocks since 2019 described in the Introduction that have been followed by inadequate policy responses to the extent that the downturn has been termed 'the deliberate depression' (World Bank, 2020).

The burden of servicing sovereign debt, the narrow tax revenue base and costs linked to the post-2011 inflow of Syrian refugees have combined to dampen Lebanon's ability to invest in infrastructure, social protection, and other areas where public goods and services are critically needed. Lebanon's infrastructure is of poor quality in terms of its internet, energy, water supply, solid waste, wastewater management and transport systems, as well as its public financial management (World Bank, 2021).

Economic geography

Lebanon's economy is anchored on its major urban centres located on its western seaboard onto the Mediterranean Sea (Figure 3), against a backdrop of a highly urban and urbanizing population. Within this urban complex, the country's economy is highly centralized on the capital. CDR estimated at 2016 that Beirut[59] was contributing to roughly 75% of national GDP (CDR, 2016).

The Lebanese Constitution's (1926 as amended) commitment to balanced development across the Lebanese territories was echoed in the NPMPLT (DAR-IAURIF, 2005; decreed 2009) which, as mentioned in the Governance section, seeks to 'alleviate the urban pressure exerted on coastal areas, in favor of a more controlled development of interior large agglomerations…' (Ibid, pp II-24 of 34). The NPMPLT advocated for 'associating all regions to the national economic development' and for the emergence of 'strong service and industrial centers (…) in different regions, other than only the Central Urban Area' (Ibid, pp IV 9 of 90). Elaboration of a national 'tourism project' to capitalize on the assets of urban centres including those outside the main commerce and service centres was proposed as one of a range of economic rebalancing mechanisms.

The distribution of per capita public investment in major infrastructure projects by CDR – a factor which

58 This figure puts Lebanon in the top three most indebted countries globally; the figure rose to 171.7% in 2020 (Trading Economic, 2021).

59 The assumed boundaries of Beirut that underpin this estimate are not known.

can influence economy geography - varies across the country. Per capita figures for 2017 show district-level concentrations on areas with infrastructure already relatively well developed (Beirut ($165 per capita), Chouf ($181), Byblos ($184), Batroun ($250)); with low or no funds allocated to less well-served areas ($40-$50 per capita for Baalbek and Akkar; zero for Rachaya, Bint Jbeil, and Jezzine). The spatiality of such public investments cannot possibly be analyzed in isolation but stands to be scrutinized and planned for within the context of a future multi-sectoral national spatial development framework[60] as recommended in the Governance section of this report.

CDR (2016) highlighted the inability of public institutions to invest in adequate infrastructure to support a growing Beirut as a constraint on its economic potential. From the perspective of nationally balanced economic geography, failure to match urban growth in the fast-growing second-tier cities identified in this report (see Urban space and population section) with adequate infrastructure and services investment will mean that their role in contributing to spatially balanced development across the territory will be compromised.

Economic Sectors

Lebanon is a service-based economy. The major sectors driving it in recent years have been banking, foreign trade and tourism, most of which are tied to urban environments. Estimates for 2020 suggest a contribution to GDP by services of 86.4%; industry of 7.2% and agriculture of 2.5% (Statista, 2021). The real estate sector, also linked to cities, has been a key component: the value of real estate transactions as at 2015 was estimated at 14% of GDP (BankMed, 2016:2, 18). Remittances are anecdotally a significant input to Lebanon's national capital and foreign reserves. The size of the informal economy in Lebanon was estimated at 30% of GDP at 2011 (IMF, reported in Daily Star, 2011). Recent comprehensive and reliable economic data is scarce.

Technology and innovation (T&I) play an important role in the economic growth, competitiveness and sustainability of development in general. T&I is affected by factors including research and development activity, human capital, investment in science and technology, infrastructure, legal and regulatory framework, and the entrepreneurship eco-system. The most developed technology in Lebanon is by far digital technology (ICT), comprising ICT services and manufacturing, hardware retail, and telecommunications. A 2018 estimate put the contribution of ICT to national GDP at 2.1% (IDAL, 2020), with projected growth likely to be driven mainly by telecommunications infrastructure investment. There is no national strategy for ICT and limited funding for research and development.

As outlined in the Introduction to this report, falling macroeconomic stability, depreciation in the unofficial value of the local currency combined with COVID-19 public health measures have devastated the economy generally, though some sectors have been particularly impacted. ILO identifies a total of six such sectors as: accommodation and food services, manufacturing, construction, wholesale and retail trade, real estate and business activities, and arts and entertainment (ILO, 2020).

Cities focus: Industry sector

Lebanon's investment agency, IDAL, promotes the value of the industry sector to the wider economy and registers the planned establishment of industrial and special economic zones to foster its growth (IDAL, 2021). The government's IMPACT survey of municipalities (Lebanon Central Inspection & Ministry of Displaced, 2021) asked municipalities about the existence of industrial zones in their territories. Of 975 municipalities responding, 114 (12%) indicated the presence of an industrial zone, 29 (3%) that zone(s) were under development, and 832 (85%) that one did not exist. Of municipalities in the ten selected cities, 20 spread across seven of the cities self-reported industrial areas (Table 18), with none of the selected city municipalities reporting zones under development. Such spatialized data may help inform government plans for locally resonant approaches to sector development.

City	*Existence of industrial area*	*Municipalities*
Tripoli	2	Tripoli, Majdalaya Zgharta
Beirut	10	Roumie, Dbaiye - Zouk el Kharab - Haret el Bellane - Aaoukar, Bsalim - Majzoub - Mezher, Ouadi Chahrour el Soufla, Sinn El-Fil, Fanar, Zalqa - Amaret Chalhoub, Biaqout, Boutchai - Merdache, Choueifat
Jounieh	2	Zouq Mkayel, Zouk Mosbeh
Byblos	0	-
Baalbek	0	
Hermel	0	-
Zahleh	1	Zahleh Maalaqa
Saida	1	Saida
Tyre	2	Aabbassiye, Sour
Nabatiyeh	2	Habbouch, Kfar Roummane
10 cities	20 (18% of Lebanon positive responses)	-
Lebanon	114	-

Table 18 Existence of industrial areas, industrial areas under development and women's industrial cooperatives. *Source:* Lebanon Central Inspection & Ministry of Displaced (2021).

60 It has been suggested in the Governance section that the current decreed but unimplemented national framework (NPMPLT (DAR-IAURIF, 2005; Decreed 2009) be revised or written afresh.

Labour and employment

Employment in Lebanon according to the 2018 Labour Force Survey (CAS and ILO, 2019) was concentrated in the following sectors:

- Wholesale and retail trade; motor vehicle repair: 19.8%
- Manufacturing: 10.9%
- Public administration and defence: 9.9%
- Construction: 8.9%
- Education: 8.6%

Employment in the six sectors[61] identified above as particularly impacted by the current economic depression is at risk not only in terms of job losses but also of wages or hours reductions (ILO, 2021). Vulnerable groups including women, youth, non-nationals, and those in low-skill and precarious informal jobs are particularly vulnerable to loss of jobs and earnings. Conditions are especially severe for individuals at multiple intersections of these vulnerable statuses.

Performance of the labour market and indirectly the effectiveness of the government policy can be measured using indicators such as unemployment rate and labour force participation rate (LFPR). Monitoring these metrics helps with tracking Lebanon's progress toward of SDG 8 (Decent work and economic growth).

8 DECENT WORK AND ECONOMIC GROWTH

Target 8.5 Employment & decent work for all

Indicator 08:05:02
Unemployment rate (%)

11% (2019) **9%** (2012)

Source: Lebanon SDG Monitor (ESCWA, 2021b)

The Lebanon SDG Monitor (ESCWA, 2021a) logs Lebanon's unemployment rate at 9% across 2007 and 2012; a figure that rises to 11% at 2019. Over the 2012-2019 period therein, unemployment increased for men (7% to 14%) and remained constant though from a higher baseline for women (14%). Rapid unemployment estimates by ILO at 2020 showed a much higher rate of 37% (ILO, 2020), a figure that can now be expected to have risen further in line with the deteriorating economic situation in the ensuing year.

Before the onset of the recent crisis, LFPR in Lebanon was on the rise from 46.2% in 2000 to 47.0% in 2019, due to the broad-based rise in human capital and increase in female participation (ESCWA, 2020). LFPR has been reported to have dropped to 46.97% at 2020 (CEICDATA, 2021).

There is limited comprehensive data on the informal economy;[62] however, a 2021 survey of deprived groups in Lebanon found that 77.8% of total employment across poor Lebanese, Syrians and Palestinians was in the informal sector (ILO, 2021).

Women in the economy

Lebanon performs poorly in regard to the gender gap in economic participation. On this parameter, the World Economic Forum (2021) ranked it close to the bottom (139^{th}) of 156 countries surveyed.

The Global Gender Gap Report

139/156 Lebanon's position relative to 156 countries regarding economic participation (after Kuwait, Qatar, Jordan, UAE, and Bahrain)

Source: World Economic Forum, 2021

Whilst the female LFPR increased from 1990 to reach 25.63% by 2019, this figure – a third of the male LFPR – is still significantly lower than upper middle-income countries (61%) and the world average (53%) albeit slightly above the MENA average (22%) (World Bank and UN Women, 2021:11). Similarly, CAS and ILO (2019) found that the gender gap between female and male labour force participation rates, at 29.3% and 70.4% respectively, is wide by regional and global standards.

Female LFPR shows a strong geographic dimension mapping onto Lebanon's core-periphery economic space. Female LFPR is, on one hand, higher than the national average in Beirut (37%) and adjacent Mount Lebanon (35%) and, on the other, lower outside this economic core, at 23% in the Bekaa; 21 % in Nabatiyeh and as low as 15% in Aakar (CAS and ILO, 2019).

Focusing on Syrians, the 2020 LFPR was recorded at a mere 12% for females and 65% for males (United Nations High Commissioner for Refugees, World Food Programme and United Nations Children's Fund, 2020); this compares unfavourably to the abovementioned 29.3% and 70.4% LFPR for female and male Lebanese respectively. It comes in the context of nationality cohort restrictions on access to the labour market.

Whilst women occupy few senior or leadership positions, an increase in women in managerial positions (SDG Indicator 05:05:02) has though been identified between 2007 and 2019. The number of women judges, for instance, rose from close to none in the 1990s to 38% of all judges in civil,

61 Food services, manufacturing, construction, wholesale and retail trade, real estate and business activities, arts and entertainment

62 This refers to work and labour 'that is not subject to national labour legislation, income taxation, social protection or entitlements such as paid leave' (ILO, 2021).

criminal and commercial courts and to 28% of all judges in the administrative courts by 2010 (ILO, 2014).

5 GENDER EQUALITY

Target 5.5 Ensure women's full and effective participation and equal opportunities for leadership at all levels of decisionmaking in political, economic and public life

Indicator 05:05:02 Proportion of women in managerial positions (%)

21% (2019) **8%** (2007)

Source: Lebanon SDG Monitor (ESCWA, 2021b)

Private-sector employment constraints lead to the concentration of women in selected fields, typically with lower pay, inferior working conditions and lower prospects for career growth. While women represent 30.5% of total employment in Lebanon, they make up 61.3% of the workforce in human health and social work fields. This situates women on the frontlines of the COVID-19 pandemic, exposing them to substantial economic and health risks (Kyrillos, 2020).

Women are also notably concentrated in the domestic work sector, where they account for 92.7% of workers. Women account for 88.2% of non-national migrant workers in Lebanon (ILO, 2016). These women work under a sponsorship system that perpetuates an increasingly exploitative environment, precarious work contracts and very low wages. The recent hyperinflation of the Lebanese currency has made it harder for households to accommodate the dollar wages of migrant workers. This has led to cuts in already low wages, and to employers' dropping migrant employees' sponsorships, which has in turn led to homelessness and joblessness of many female domestic workers.

Women's cooperatives

The government's IMPACT survey of municipalities identified 22 women's industrial cooperatives out of 977 responding municipalities nationally. Among the municipalities making up the ten selected cities in the current report, 20 industrial areas were self-reported by responding municipalities (Table 18) but only one municipality – Zahle Malaqaa – reported a women's industrial cooperative.

Poverty

Income poverty in Lebanon has risen from 25% of the population in 2019, 55% in 2020 to almost 74% in 2021, largely driven by an effective inflation rate of 281% from June 2019 to June 2021 (ESCWA, 2021). Surging unemployment and currency devaluation have caused massive inflation for essentials including food. The scaling back of food, energy and medical subsidies – and the resulting exacerbation of access to these – have contributed to the plight, affecting vulnerable populations most harshly in the absence of an adequate social safety net.[63]

A multidimensional measure[64] of the poverty rate rose from 42% in 2019 to 82% in 2021 (ESCWA, 2021b).

- Lebanese nationals have been plunged into poverty following the deterioration of economic conditions. Amongst Lebanese households, multi-dimensional poverty is at 77% (ESCWA, 2021b).
- UNICEF highlighted that 77% of all households do not have enough food - or money to buy food (UNICEF, 2021: 3).
- This figure rises to 99% for Syrian households (Ibid: 3). At 2021, an overwhelming 88% of the 1.5 million Syrians in Lebanon, many already without an adequate home or stream of earning, are now living below the Survival Minimum Expenditure Basket, a proxy of extreme poverty, up from 55% in 2019 (UNHCR, WFP and UNICEF, 2021).
- Palestinians, a disproportionately impoverished group at baseline, have been particularly affected in terms of access to livelihood opportunities, across both PRL and PRS. Almost all Palestine refugees are now below the poverty line.
- Women, particularly those with disabilities or other health risks, represent a particularly vulnerable group.

City-level

Geographically, multidimensional poverty was found to be divided unequally across the governorates, with lower than average rates around the country's urban core in Beirut (73%) and Mount Lebanon (75%); close to average rates around the two main seaboard governorates containing the major cities of Tripoli, (North Lebanon Governorate at 85%) as well as Tyre and Saida (South Lebanon Governorate at 87%); and higher than average rates in the other governorates, reaching 92% in the governorates of Nabatiyeh, Baalbek-Hermel and Akkar (ESCWA, 2021). Across the ten selected analyzed in this report, those with higher shares of Non-Lebanese can be considered to have been particularly affected in light of the nationality-related patterns of poverty identified above. The populations of the cities Tyre, Baalbek, Saida and Zahleh all comprise over a third Non-Lebanese (Figure 9).

63 In January 2021, the World Bank social support initiative earmarked US$246 million in the Emergency Crisis and COVID-19 Response Social Safety Net Project (ESSN) to provide emergency cash transfers and access to social services to 786,000 poor and vulnerable Lebanese reeling under the economic and COVID-19 crises as a means to enhance Lebanon's existing but limited National Poverty Targeting Program (NPTP) launched in 2011.

64 The ESCWA 'Multidimensional Poverty Index' is made up of six dimensions (education, health, public utilities, housing, assets and property, employment and income) and 20 underlying indicators. A household is classified as living in multidimensional poverty if it is deprived in one or more dimensions, and in extreme multidimensional poverty if it is deprived in two or more dimensions (ESCWA, 2021).

Whilst acknowledging the fast-moving deepening of poverty on the ground and the range of vulnerability assessments underway through the UN and partners, Table 19 snapshots a range of poverty proxies and indicators relating to the ten selected cities. Whilst outdated at this point, a background of vulnerability concentration in the cities is clear: two-thirds and above of the cadastres making up seven of the cities - Tripoli, Jounieh, Baalbek, Hermel, Saida, Tyre and Nabatiyeh – were among the most vulnerable in the country on a multi-indicator scoring (IACL, 2015). The diversity of poverty baselines across these cities onto which the current crisis is emerging is shown. On this selection of indicators, the cities of Baalbek and Tripoli appear to have had the most challenging baselines and that of Byblos the least.

City	*No. of city cadastres among the 251 most vulnerable nationally*	*No. of city cadastres identified as - or containing one or more areas identified as - among the 498 most disadvantaged areas nationally*	*UNRWA-managed Palestinian Camps*	*"Poor or very poor" in self-classification of wealth status survey (district-level) (%)*
Tripoli	12 of 18	1 cadastre; 5 subcadastral areas	1 (Beddawi)	31.7% (Tripoli District); 48.6 (Minieh-Danniyeh District); 25% (Zgharta District)
Beirut	23 out of 55	8 cadastres; 11 subcadastral areas	3 (Dbayeh, Shatileh, Bourj Brajneh, Mar Elias)	25.5% (Beirut District)
Jounieh	4 of 5 (only Jounie Haret Sakhr not)	5 subcadastral areas	0	18.5% (Keserwan District)
Byblos	1 of 5 (Jbayl cadastre)	0	0	12.7 (Jbeil District)
Baalbek	2 out of 3 (Douris, Baalbek in 1st quantile of 251)	1 cadastre; 6 subcadastral areas	Wavel Camp (in Baalbek cadastre/municipality)	40.6% (Baalbek District)
Hermel	1 out of 1 (Hermel in 1st quantile of 251)	1 subcadastral area	0	47.1
Zahleh	4 of 16	1 subcadastre area	0	37.3% (Hermel District)
Saida	6 of 9	5 subcadastral areas	2 (Ein El-Hilweh; Mieh Mieh)	19.1% (Saida District)
Tyre	4 of 4	1 cadastral; 9 subcadastral areas	3 (Burj Shemali, Rashidieh, El Buss)	30.3% (Tyre District)
Nabatiyeh	5 of the 6 (only Mazraat Kfarjaouz not)	1 cadastral; 4 subcadastral areas	0	28.2% [Nabatiyeh District]
10 cities	62 out of 123 city cadastres	-	11	-
Lebanon	251	-	12	26.3

Table 19 Indicators of poverty at subnational and city level covering the ten main cities. *Sources:* Respectively, Inter-agency Coordination Lebanon, 2015; UN-Habitat & UNICEF, 2017; UNWRA.org viewed 2021; CAS & ILO, 2019.

City municipalities group discussion

?

Inter-municipal collaboration on economy and livelihoods?

For each city, respective municipalities were grouped into a consultation meeting. Municipalities were asked: "In what sector(s) do municipalities already work together collaboratively? Which sector(s) not currently worked on collaboratively do you consider most urgent to work on collaboratively, from a sustainable urban development perspective?" (Table 16).

Regarding **economy and livelihoods**, the topics highlighted as potential areas for intermunicipal collaboration were economic development, labour and employment, poverty mitigation and women in the economy.

- Six cities (Tripoli, Byblos, Jounieh, Hermel, Nabatiyeh and Tyre) reported some degree of current collaboration on all or almost all of these themes.
- Two cities (Beirut, Zahleh) reported no intermunicipal collaboration on these topics, though Beirut highlighted 'economic development' as a future priority for horizontal coordination.
- Overall, cities highlighted the limited role that municipalities have over economic development, job creation and delivering the infrastructure the private

sector relies on; cities' time and capacities have been decreasing in the face of emerging crises of the last two years to act on this theme, with municipal fee collection from residents slowing to a halt in light of the deteriorating poverty levels (Baalbek). Nonetheless, efforts are underway to coordinate on job vacancies and to limit business closures (Byblos); and the valuable role of international entities in livelihood-related projects was highlighted (Tripoli) as was that of donations from locally linked philanthropists (Jounieh).

Ways forward

There is a well-developed, fast-growing body of thought emerging domestically and from the international community about routes to mitigating Lebanon's complex economy and livelihoods challenges. This report section has sought to bring an urban dimension to deliberations, and ways forward below suggest an area-based lens onto the challenge.

- The foregoing has highlighted that cities are historically the powerhouses of Lebanon's economic growth and prosperity. There is value in deliberating on economic recovery in a 'whole of city' framework so that urban advantages can be harnessed in support of short term mitigation measures and thus medium and longer term resilience-building.
- The need for 'building back better' in terms of economy and livelihoods to feature inclusive development is widely acknowledged. By demonstrating the geography of vulnerability between cities (in terms of the varying nationality cohorts per city and district level household wealth status) and within cities (at cadastre, neighbourhood and Palestinian camp levels), it is clear that a 'leave no no-one behind' approach must also imply 'leave no place behind'. Updated analysis of the geography of poverty and disadvantage is required to support targeting; both at small area intra-city level and at aggregate level for inter-city comparisons. Opportunities should be identified to analyze emerging vulnerability assessment data along urban and intra-urban lines to this end. The generation of nationally endorsed urban boundaries to frame such analyses consistently over time - and as a unit for the purposes of all official statistics generally - should be prioritized.
- Building on the previous point, tracking progress toward SDG target 1.1 which aspires to eradicate extreme poverty for all people everywhere demands the disaggregation of economic and livelihoods metrics not only by sex, age and other demographics but also by urban and rural locations, as is also stipulated for several other SDGs (see Annex 1).
- The multi-dimensional poverty index (ESCWA, 2021b) has invaluably highlighted the critical role of public utilities and housing as dimensions of poverty of a comparable standing to income and employment, making patently clear the criticality of good urban management and planning to both humanitarian and development agendas. Similarly, at a national level, the importance of adequate investment in public infrastructure and services to support urban growth, as noted by the government in the case of Beirut (CDR, 2016) was highlighted. As assistance flows into Lebanon's cities where most of its people live, it is recommended that opportunities be taken by donors, municipalities and relevant ministries to advocate for space to (1) formulate or renew locally owned, evidence-based 'whole of city' visions – or urban strategies - into which short and medium term assistance can slot and therefore support resilience-building and (2) formulate or renew the national spatial development framework[65] to coordinate and guide city efforts.
- In the longer term, the government's investment agency, IDAL, may consider incorporating a city-level filter to its territorial branding and promotion activities, currently pitched at the governorate level. Such city promotion may draw on urban data-gathering and resulting urban visions or plans which demonstrate to investors each city's competitive advantages and planned trajectory.



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65 See Governance section for a description of the current unimplemented NPMPLT

Infrastructure and services



Photo in Beirut. ©UN-Habitat, 2019

Housing and HLP rights

National

11 SUSTAINABLE CITIES AND COMMUNITIES

Target 11.1 Adequate, safe and affordable housing

Indicator 11:01:01 Proportion of urban population living in slums[66]

61.1% (2018)

53.1% (2014)

Source: Lebanon SDG Monitor (ESCWA, 2021b)

The housing sector is one of the main economic sectors in Lebanon. The value of real estate transactions[67] was estimated at $8.01 billion in 2015 with a value added to GDP of 14%, a figure which reaches 20% with the addition of the construction sector (BankMed, 2016: 2, 18). The real estate and construction sectors together were estimated to account for 20% of total national income at that point (Ibid). This sector witnessed a boom in the aftermath of the 1975-1990 Lebanese Civil War (in parallel to the fast urbanization rate of that time) as well as in the aftermath of the 2007-2008 global financial crisis. It was able to sustain a significant role in the economy even during the early part of the economic and financial crises since 2019 as it was perceived as a haven for depositors who no longer had access to their savings.[68] With a limited role for the Public Corporation for Housing (PCH) under the Ministry of Social Affairs (MoSA), and in the absence of a ministry for housing or urban development, the governance housing is diluted and fragmented under multiple public stakeholders, limiting the ability to strategize and manage this sector.

The housing sector in Lebanon has long suffered from inadequate and insufficient national policies, which have significantly impacted the balanced operation of the housing market. Housing is mainly supplied by the private sector with very few (mostly unsuccessful) social housing projects implemented by public entities. A main issue affecting the sound functioning of the housing market is the mismatch between supply and demand. A long history of demand-side policies mainly subsidizing homeownership has spurred construction activities for

66 Slum households are defined as a group of individuals living under the same roof lacking one or more of the following conditions: access to improved water, access to improved sanitation, sufficient living area, and durability of housing, lack of security of tenure (UN-Habitat, 2018).

67 Residential and other use categories

68 As an indicator, between November 2019 and the most recent available datapoint of Sep 2021, the total amounts subject to municipal fees in sales contracts for real estate in Lebanon skyrocketed compared to the previous 10 years and more (Gherbal Initiative, 2021).

a limited segment of the population who have access to bank loans, contributing to housing costs rising to unattainable levels for a large section of residents. The mismatch in demand and supply is at least partly a result of the conspicuously absent evidence base on demand needs of different income groups; combined with regulatory interventions skewing the balance between demand and supply. Investment directed to real estate and speculative practices uninhibited by taxation have significantly contributed to sustaining high housing prices.

Rental housing has also witnessed poor regulations; a key recent feature has been the deregulation of a 1992 rent control law (see below 'Legislation on land and housing') which had in effect preserved a limited stock of affordable housing to tenants in Lebanese cities where the price of land and housing has otherwise increased manifold in the past 15 years.

The unofficial devaluation of the Lebanese currency since 2019 has placed additional strain on the ability of renters - as well as mortgage payers - to afford their housing, with virtually no social protection programme in place to support struggling households in securing their right to adequate housing.

Lebanon's fast and poorly managed urbanization in recent decades alongside unaffordable housing prices has allowed for the proliferation of informal housing areas in and around major urban centres to respond to the housing needs of the most vulnerable segments of the population. Informal areas in cities initially grew as part of the rural exodus during the 1975-1990 Civil War, resulting in poor urban pockets at the peripheries of major urban centres. The large influx mainly to urban and peri-urban locations of refugees (from Palestine in the 1940s; then from Syria since 2011) has expedited the endogenous urbanization rate, resulting in additional strain on housing and other services in dense and vulnerable urban pockets. Currently, an estimated 69% of Syrian refugees are residing in residential shelters (UNHCR, WFP and UNICEF, 2021), mainly in poor urban settings where housing costs are relatively low.[69] Twelve official Palestinian refugee camps characterized by precarious housing, land and property (HLP) rights are dispersed across Lebanon's cities and serviced by UNRWA. Many of these camps outgrew their official boundaries and spilled out into so-called Palestinian gatherings that have merged with the existing urban fabric of the cities of which they are part. Although variations exist amongst the cohorts living in informal areas across Lebanon, main characteristics of the informal stock include poor living conditions, limited access to basic urban services and amenities, overcrowding, marginalization and tenure insecurity. The largely unplanned nature of such settings means that transport and mobility is constrained.

Right to adequate housing

International human rights law recognizes the 'right to adequate housing', enshrined in the Universal Declaration of Human Rights (article 25) and also in the International Covenant on Economic, Social and Cultural Rights. In the absence of legal detail for this fundamental right, the OHCHR (2012, in Houri, 2018:2) has identified its elements as including:

- Legal security of tenure
- Affordability
- Habitability (mainly protection from the elements)
- Availability of services, materials, facilities and infrastructure
- Accessibility

Whilst not explicitly providing for the right to adequate housing, the Lebanese Constitution (1926, as amended) assures it since, according to Article 2, Lebanon is a founding and active member of the United Nations and abides by its covenants and by the Universal Declaration of Human Rights. This in principle carries an international obligation for extending this primary social right to all populations living in Lebanon across gender, age, religion, race and nationality lines. More directly, the Lebanese Constitution does contain limited supporting elements, specifically '…Article 14 [home]: "The citizen's place of residence is inviolable" and protected from unlawful entry' (and) '…extrapolated from Article 15, protecting property "ownership" from confiscation, except for lawful public purpose with compensation as affirmed in jurisprudence and State Consultative Council decisions' (Public Works Studio and Habitat International Coalition - Housing and Land Rights Network, 2020).

Legislation related to land and housing

The land tenure system in Lebanon includes statutory, customary and religious land tenure systems in addition to informal land rights, with each of these systems governed by special legislation and unwritten practice rather than codified law; customary tenure rights including those pertaining to informal settlements do not have access to formal security of tenure (United Nations Human Rights: Special Procedures, 2021).

The deregulation of rents that have been price-capped since 1992 through a law passed in 2014 and amended in 2017 has resulted in thousands of so-called 'old rent' households becoming at risk of eviction from their lifelong residences due to the inability to pay the revised rent denominated at the market rate. Whilst regularization of rents in the interests of equality may appear a valid principle if supporting safeguards were in place; the new law, however, was passed with no alternative social safety

69 Among Syrians in Lebanon in 2021, a further 22% live in informal tented settlements mainly located in rural areas; and 10% live in shelters not designed for human inhabitation ('non-residential shelters'), such as garages, shops, agricultural out-houses. (United Nations High Commissioner for Refugees, World Food Programme and United Nations Children's Fund, 2021)



Photo of Beirut. ©Ahmad Chinder, 2021

plan for households on rent-controlled contracts;[70] such households face incremental phased increases in their rents up to a market-matching level. This has led to many households' gradual expulsion from their neighbourhoods and destabilized a significant population group who are disproportionately low-income and/or elderly.

Discrimination in access to housing, land and property

In the absence of a national housing policy or of a social housing programme, the state's policy over the past three decades, largely geared towards facilitating homeownership, has indirectly excluded groups who cannot afford homeownership and/or those with specific housing needs.

Lebanon has legislation that directly discriminates against certain groups in relation to the right to adequate housing. The Nationality Law prevents Lebanese women from passing on nationality to their children unless the father is of Lebanese nationality (HRW, 2018). It affects these persons' access to inheritance and ability to register title to housing.

Palestinians in Lebanon are not allowed to acquire or transfer property, including those that have Lebanese mothers and Palestinian fathers (NRC, 2008). The ban on Palestinians registering legal title to housing and land greatly diminishes their chance of enjoying security of tenure outside the camps. Palestinian refugees in camps are forbidden by law from bringing building materials into some camps, curtailing the repair or improvement of homes. Specific housing, land and property challenges faced by Palestinian women in Lebanon have also been identified (NRC, 2013).

Additionally, the 2017 amendment to the law prohibits rental assistance to non-Lebanese tenants, which further exacerbates the risk of eviction to non-Lebanese tenants on rent-controlled contracts.

The policy oversight and governance inaction in informal areas and towards informal housing markets has led to widespread discriminatory and exploitative practices that vulnerable groups are subjected to, with limited recourse to justice.

Women's right to land in the law

In Lebanon, although women legally have equal rights to administer and own land, Lebanese law does not explicitly prohibit gender discrimination. Lebanon has 15 separate personal status laws for its recognized religions but no civil code covering issues such as divorce, property rights, or custody of children. For example, Muslims adhere to inheritance rules established under Sharia law, which means that women generally inherit less than men (UN-Habitat, 2018). Women often cede their rights to inheritance to their brothers to ensure land is retained within the family, as traditions require. Joint registration of land is not compulsory, and although there are no exact numbers, it is rare that property is registered on both spouses, and very rare that it is registered only on the woman.

The personal status laws, which vary between the different religious and sectarian groups, discriminate against women and children in their land and housing rights, particularly in situations of marriage, divorce and inheritance. Multiple attempts by civil society groups have failed to materialize a unified personal status law that equates between men and women in all the different religious groups.

The Nationality Law, as noted above, constrains equal rights by removing the ability of women with foreign husbands to pass on nationality to their children, therefore affecting inheritance issues.

Lebanon has to date logged no data against SDG Indicator 5.A.2 'Percentage of countries where the legal framework (including customary law) guarantees women's equal rights to land ownership and/or control'.

Evictions

Security of tenure is a problem not only for rent-controlled tenants, but also refugees, migrant workers, LGBTQI persons and female-headed households who are illegally evicted on a regular basis.

Although there are some data sources on evictions in Lebanon, most information gathered focuses on Syrian refugees. UNHCR monitors collective evictions through its ActivityInfo tracking system, and individual evictions are monitored via UNHCR's Protection Monitoring household survey of refugees. Public Work Studio (PWS) and the Norwegian Refugee Council also run eviction trackers.

Evictions have increased since the beginning of the economic crisis in 2019, with the situation constantly deteriorating. Many low-income Lebanese households have been evicted due to inability to pay rent. NRC has through its eviction tracker identified a large increase in threats of evictions during the first quarter of 2021. Failure to pay rent was by far the most common reason for the eviction threats. Legally, all evictions must be approved by a court order, though the following of such due process is extremely rare in practice. Humanitarian actors are reporting that thousands of families face homelessness as a result of the economic crisis and increased poverty.

Public Works Studio has been monitoring evictions in Beirut since the August 2020 Beirut Port explosion via its Housing Monitor, with a disaggregation of their data providing insights into the nature of tenure security vulnerabilities.

- Over November to December 2020, the Housing Monitor tracked 119 households affected by housing

70 Whilst a rental assistance fund was meant to be established as part of the law proceedings, it did not materialize due to funding scarcity, leaving would-be beneficiaries with no housing support post-rent adjustment.

vulnerabilities, affecting 427 people. The majority of the affected were 'new tenants', from different nationalities. The number of Lebanese affected by housing vulnerabilities constituted approximately 16% of all notifications, 31% of whom were "old tenants".

- Over January to February 2021, the Housing Monitor logged 88 claims of housing vulnerability affecting 237 people, almost 50% of whom were children. Of the affected persons, 36 were single mothers threatened with eviction.
- Over March to April 2021, 27 reports of eviction threats were received by the Housing Monitor, including one executed eviction.
- The above reports were mostly located in Beirut and its suburbs, out of which 25% were in the areas affected by the August 2020 Beirut Port explosion; notably, this is despite the passing of a specific law protecting residents of the blast-affected areas from eviction.

There is in general a gap in terms of comprehensive national data on evictions related to Lebanese groups against which to analyze the impact of the current economic crisis.

City-by-city

Beyond the issue of absolute shortages of affordable housing relative to demand, the low construction quality of residential units has been called into question, particularly in terms of health implications[71] which are highly salient to COVID-19 risk; and the concentration of collapse risk - such as may be presented by seismic or heavy precipitation events - in poor urban neighbourhoods. Profiles of disadvantaged neighbourhoods by city (Table 20) suggest that between 4.2% and over half of residential buildings in selected poor urban quarters are 'in need of major structural repair / emergency intervention'. Of buildings in profiled neighbourhoods in Tripoli and Beirut, 50.8% and 52.8% respectively were dangerously unsound in these terms.

City	*Buildings in need of major structural repair/emergency intervention (%) based on neighbourhood profile(s).*
Tripoli	14.3% - 50.8%
Beirut	17.3%-52.8%
Jounieh	4.2%
Byblos	No data
Baalbek	11.1%-34.6%
Hermel	No data
Zahleh	18.3%
Saida	30.9%
Tyre	25.3%
Nabatiyeh	No data

Table 20 Buildings in need of major structural repair/ emergency intervention (%) based on neighbourhood profile(s) of most disadvantaged areas, with highest and lowest scores shown for cities with more than one profile. *Source:* UN-Habitat and UNICEF (2018-2021).

Rental prices in poor urban neighbourhoods

Figure 12 shows the range of monthly rent price averages by district paid by Syrian households in Lebanon in 2021 (UNHCR, WFP and UNICEF, 2021). The data is filtered to show households living in residential shelters only as opposed to informal temporary settlements or types of shelters not intended for human inhabitation ('non-residential'). Although there is no inventory or database of rental amounts paid by Lebanese households at the national and sub-national levels, it is fair to suggest that these rents are similar to those paid by Lebanese households living alongside Syrians in poor urban neighbourhoods.

Whilst the data is at the district rather than city level, the rental buoyancy anchored on Beirut (around 550,000LL) extending northwards through Metn and Keserwan is apparent. A secondary peak is discernible in the country's second city, Tripoli (410,000LL). On another axis, rental prices are higher towards the seaboard and fall away inland.


Photo of Saida. ©Ahmad Chinder, 2021

71 The link between housing envelope soundness and health is well established. An EU-wide estimate has linked these housing parameters to health costs: "Problems with keeping homes warm and dry are identified as having the greatest impact on the health of occupants. If such problems were rectified now, it is estimated that the direct medical cost savings would be around 9 billion Euros per year. The total cost to EU society of leaving people living with such housing problems is estimated to be some 194 billion Euros per year" (Nicol et al. 2015)

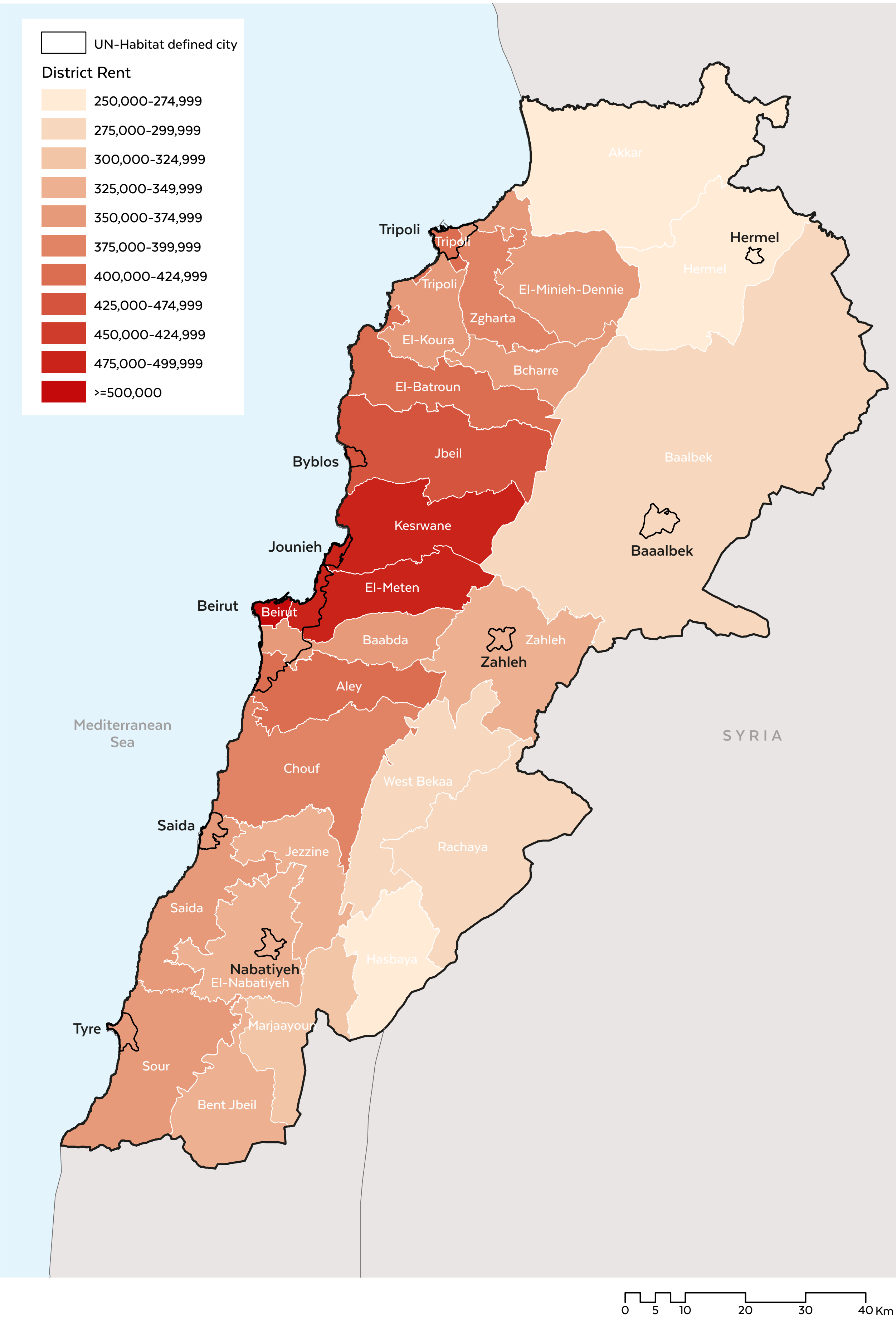


Figure 12 Map showing monthly rent in LBP reported by Syrian households living in residential shelters by district in Jun-Jul 2021, relative to the ten selected cities. *Source*: UNHCR, WFP and UNICEF, 2021.

Selected city-based residential market sales prices

The Real Estate Syndicate of Lebanon's (REAL)[72] Index and Statistics Committee undertook a 'REAL Price Index Survey' of real estate professional members, aiming to identify residential and commercial property sales value by geographical area for selected subnational markets, targeting buildings five or fewer years old. The average (Table 22) as well as lower and upper prices (Figure 13) were calculated per area. Geographical markets with low volumes of transactions are not included.

The price estimates are based on estimated transaction prices. Residential and office figures were based on a combination of REAL brokers' estimates (weighted 70%) and estimates from OLX Property[73] (weighted 30%). (Showroom prices were based on REAL brokers' estimates only.)

In the residential real estate market of Beirut, average sales prices reached - at $4,932/m^2$ for Downtown Beirut - almost seven times that for the lowest-priced market (Nabatieh, $708/sqm). Broadly, average prices in the segmented Beirut market exceed $2,000/m^2$ whilst those outside fall below that threshold. Three residential real estate market categories appear to emerge:

- >$2,000/m^2$ in Beirut with its various named submarkets
- >$1,000<$2,000/m^2$, comprising Metn, Keserwan, Byblos and Baabda
- <1,000/m^2$, comprising Zahle and Nabatiyeh.

In general, residential real estate market value has tended to increase with population size linked to the relatively more steady demand in larger cities. The impact and duration of Lebanon's current financial and economic crisis, however, remains to be discerned; an updated REAL survey under preparation at time of writing may offer initial insights into the scale of the impact at the level of market prices in the selected locations covered.

The price differential between residential and office use adds to understanding of the market context for residential real estate construction relative to other uses.[74] Whilst the data pertain to new buildings only, the point remains that the profile of competing land use pressures varies widely between cities, indicating the need for context-specific and data-led urban planning responses at the level of individual cities.

REAL-defined areas (boundaries not available)	*Residential*	*Offices*	*Showrooms*
Beirut	$3,136	$3,863	$6,929
Beirut - Ras Beirut	$3,443	$4,092	$7,421
Beirut - Downtown	$4,932	$5,754	$8,913
Beirut - Achrafieh	$2,912	$3,596	$6,971
Beirut - Other Areas	$2,544	$3,251	$5,587
Metn	$1,677	$1,960	$3,122
Keserwan	$1,629	$1,857	$2,954
Byblos	$1,074	$1,235	$1,867
Baabda	$1,687	$1,716	$2,614
Zahleh	$918	$982	$1,800
Nabatiyeh	$708	$646	$1,000

Table 21 Average sale prices per m². *Source:* Real Estate Syndicate of Lebanon (REAL), 2019.

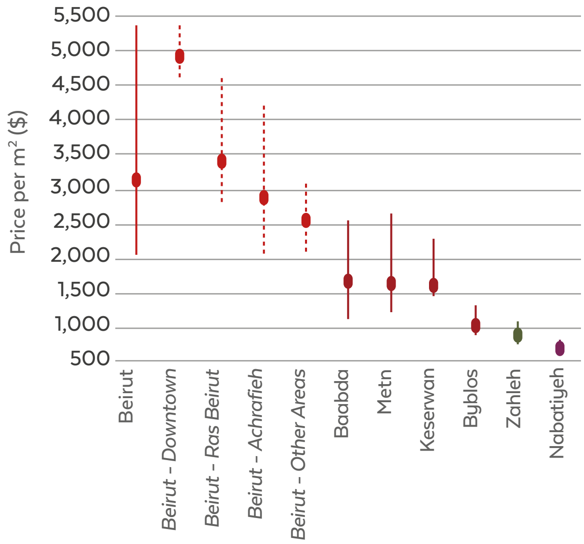


Figure 13 Average price and price range of residential real estate aged 5 years and under in selected real estate markets in Lebanon in 2019. *Source:* Real Estate Syndicate of Lebanon (REAL), 2019.

Focus on Beirut

Housing in Beirut City, hosting more than half of the country's population, is the most unaffordable for most residents. The city is home to acute contrasting realities, including vacant high-end units on one hand, and many of the most vulnerable localities in Lebanon on the other hand. According to a study conducted by RAMCO

72 REAL is the national representative organization for real estate brokers and consultants across Lebanon

73 OLX is a major platform listing real estate sales in Lebanon.

74 Currently, offices offer higher prices than residential uses, at an increment of 23% higher in Beirut, 17% in Metn, 14% in Keserwan, 15% in Byblos, 7% in Zahleh. Office and residential prices are comparable in Baabda and in Nabatiyeh, offices are about 9% lower-priced than residential uses.

Real Estate Advisers in 2014, the starting price for an under-construction apartment in municipal Beirut varied between $1,925/mand $7,647/m^2. Newbuild residential prices reached $4,932 in Beirut at 2019 (REAL, 2019). These figures will have certainly changed in 2021 due to the sharp currency devaluation and dire socio-economic and financial crises.

At governorate level, home ownership is lowest in Beirut and Mount Lebanon (64.1% for both; compared to 84.1% in Baalbek-El Hermel Governorate, where it is highest) (CAS and ILO, 2019). It is worth noting that by 2017, 3.5% of PCH loans had been given to homebuyers who purchased apartments within Beirut Governorate, and about 74% to homebuyers purchasing apartments in Mount Lebanon Governorate.

According to neighbourhood profiles of seven of Beirut City's most vulnerable neighbourhoods nationally by UN-Habitat and UNICEF (2017-2021), more than half of the dwellers in these predominantly informal areas are renters, ranging between 54.1% in Sabra to 93.6% in Nabaa. The informal rental sector has therefore been the main provider of shelter to the most disadvantaged households, whereas capable median-income households prefer to invest in buying a home, in the past including through facilitations provided by the PCH.

City municipalities group discussion

?

Inter-municipal collaboration on housing and shelter?

- City municipality survey respondents considering their cities' intermunicipal collaboration on aspects of sustainable urban development reported current collaboration on '**housing and shelter**' in two cities only (Byblos, Hermel) (Table 16).
- Byblos reported implicit coordination on housing supply between its component municipalities of Jbeil and Blat, insofar as Blat meets some of the housing needs for commuters to Jbeil. Further investigation would be required to delve into the nature and scalability of such cooperation. It is notable however that these two cities reported live collaboration on all infrastructure and service sectors.
- On another note, the one-municipality city of Hermel operates outside any union of municipalities, indicating that unionization is not necessarily a condition for municipal cooperation.

Ways forward

- The shortcomings of the housing sector in Lebanon necessitate a holistic approach to addressing the root causes of its multiple issues and to ensure inclusivity and sustainability. At the centre of the current recommendations is a comprehensive national housing policy that is in line with an overarching national spatial development framework on one hand and, on the other hand, a national social and economic policy framework that includes social protection priorities for the national government and financial, fiscal and taxation reforms. The UN-Habitat *Guide for Mainstreaming Housing in Lebanon's National Urban Policy* (UN-Habitat, 2021j) offers support in this regard.
- Urban and housing policies need to be informed by evidence to be able to adequately respond to the realities of the different sectors and how they interrelate, therefore an in-depth assessment and diagnosis of the housing sector including the collection of housing-related data is needed to inform housing-related indicators. UN-Habitat offers the Housing Profiling tool which can be used to guide the evidence collection in preparation for a housing sector reform.
- The spatial relationship between housing and transport remains uncoordinated in Lebanon. International experience in using the uplift in land value that comes with the granting of planning permission for residential development to fund public transport infrastructure stands to be considered in Lebanon. The instigation of land use policy is critical to supply the locational framework for such efforts to secure investment into public transport infrastructure integrated with housing (as well as employment).
- The ongoing economic and financial crises bring to light the importance of diversifying the channels of housing provision and access and most importantly the regulation of the rental sector which has the ability to elastically and dynamically respond to multi-levelled housing needs if properly regulated.
- There is an imperative to progress towards ensuring the structural soundness of residential buildings, in light of the area-based concentrations of poor building quality identified above and typically found in informal urban neighbourhoods. Within the overall theme of ensuring building quality control, there is also a need to review regulations and incentives guiding building and construction to foster sustainable design features in newbuild as well as through retrofitting.
- The housing, land and property (HLP) issues of Lebanese households are widely under-researched, especially in major urban centres where the issues are found to be complex and deeply rooted. The August 2020 Beirut Port explosions led to new HLP challenges and compounded existing ones, bringing them to the forefront of crisis response considerations including in regard to long-term urban recovery. Therefore, researching the HLP issues of Lebanese households is a priority.
- An overall comprehensive legislative modernization is required that reforms cross-cutting laws indirectly impacting the right to housing and that mainstreams

considerations impacting the right to housing in other relevant laws such as the Personal Status Law.

- A systematization and centralization of eviction monitoring to cover all those living in Lebanon is a valid goal, drawing on the highly valuable albeit partial initiatives currently operational, thus responding to the increasingly widespread threats of evictions linked to the rapidly deteriorating economic situation in the country. More comprehensive and appropriately disaggregated data would stand to improve advocacy for protection of HLP rights and better guide the design of HLP support interventions.


Photo in Beirut. ©UN-Habitat, 2019

Water

Globally, water use has been on the rise by 1% per year since the 1980s, driven by population growth, socio-economic development and changes in consumption patterns (WWAP, 2019). Access to drinking water and sanitation are recognized as basic human rights[75] because of their importance to health and human dignity. OHCHR highlights that 'International human rights law obliges States to work towards achieving universal access to water and sanitation for all, promoting a human rights-based approach to SDG 6 'Clean water and sanitation' (OHCHR, 2021a).

National

Water and sanitation in Lebanon have long been noted to be behind pace with the economic development status of the country (World Bank, 2010). For the water sector, whilst network coverage is relatively high, supply continuity and quality is low, necessitating expensive supplementation with private supply; and technical losses in the poorly maintained network are high – estimated at 48%[76] at 2010 compared to a MENA average of 37% (Bassil, 2012); with over 50% of the transmission and distribution network noted as far back as 2012 to be 'past their useful life' (Ibid).

There is constrained surface storage capacity and limited technological advances in the face of emerging climate change impacts on the sector. In terms of water quality, there is a high incidence of bacterial water contamination and a prevalence of unauthorized groundwater pumping linked to salinization.

In regard to user-level conservation, tariff collection is low (WWAP, 2019),[77] affecting both water conservation behaviours and upgrading possibilities in a challenging context of high demand growth, driven both domestically and by the post-2011 influx of Syrians.[78] Lebanon is one of a small number of countries in the region with next to no water metering, and meters which are installed are for industrial rather than residential uses (WWAP, 2019).

There is a rising national water budget deficit; renewable water resources per capita in Lebanon as at 2015 were below the scarcity threshold of 1,000m2/person/year, having dropped from 926m3 in 2009 to 699.8m2 by 2018 (FAO, 2018). It is fair to suggest that 'water scarcity in Lebanon is largely due to institutional and infrastructural challenges' (Walnycki and Husseiki, 2017).

75 'International human rights law obliges states to work towards achieving universal access to water and sanitation for all, without discrimination, while prioritizing those most in need. Fulfilment of the human rights to water and sanitation requires that the services be available, physically accessible, equitably affordable, safe and culturally acceptable' (WWAP, 2019).

76 More recently, UNICEF suggests that network losses may amount to 40% (UNICEF, 2021).

77 In terms of conservation, Lebanon is one of a small number of countries in the region with next to no water meter, and those that are installed are for industrial rather than residential uses (WWAP, 2019).

78 The influx of Syrian refugees from 2011 presented a demographic shock which increased water demand, overlying background population growth trends. The MoE estimated an 'increase in domestic water demand due to the refugees between 43 to 70 Million Cubic Meters (MCM) by the end of 2014. This incremental water demand of the refugees corresponds to an increase of the national water demand between 8 and 12 percent". (MoE 2014: 4).

According to ESCWA's SDG Data Portal (ESCWA, 2020), Lebanon's performance against SDG 6 .1.1 on 'the proportion of people using safely managed drinking water services' is slowly moving in a positive direction (reaching 48% at 2020 up from 44% in 2000) though remains far from full coverage as envisaged by Agenda 2030 (UN, 2015).

6 CLEAN WATER AND SANITATION

Target 6.1 universal and equitable access to safe and affordable drinking water for all

Indicator 06:01:01 Proportion of population using safely managed drinking water services, by location (%)



48% (2020)

47% (2017)

Source: Lebanon SDG Monitor (ESCWA, 2021b)

Water access standards is one of a range of determinants of slum living conditions. By definition, there are substantial differences between slum and non-slum households in terms of access to water and sanitation. The non-inclusion of slum settlements from service provision is often directly related to the legal tenure of the land in question. The UNESCO World Water Assessment Programme promotes the 'need to enact laws and policies to dissociate the tenure status from service provision' (WWAP, 2019:105). Palestinian camps, officially not connected to the public network, are relevant urban-sited instances.

In the context of the current compound crisis in Lebanon, costs of fuel and maintenance supplies for the public water utility providers are rising, with the parallel threat of collapse of the national power grid bearing implications for continuity of water treatment, pumping and distribution. Exacerbated by high levels of unaccounted water losses in the network as mentioned above, this could lead to the loss of access to safe water for an alarming 71% majority of the population (UNICEF, 2021).

Water sources

Data from the government's IMPACT database (Figure 14) shows sources of potable water indicated by municipalities, with 59% reporting the use of the public network and 48% of wells. The majority of responding municipalities noted their water networks were in 'acceptable' conditions. It can be expected that illegal wells are not reported (Table 22).

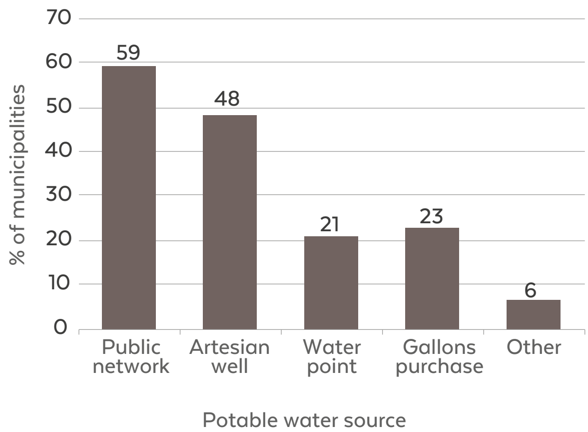


Figure 14 Potable water sources existing in municipalities based on 1,021 responding municipalities nationally. Lebanon Central Inspection & Ministry of Displaced (2021).

	Potable water sources (1,021 responding municipalities)					*State of the water network (602 responding municipalities)*		
	Public network	*Artesian well*	*Water point*	*Gallons purchase*	*Other*	*Bad*	*Acceptable*	*Good*
Count	602	489	210	235	64	139	341	122
Percent	59	48	21	23	6	23	57	20

Table 22 Potable water sources existing and state of water network by municipality in Lebanon. *Source:* Lebanon Central Inspection & Ministry of Displaced (2021).

Agricultural irrigation constitutes the largest user of water at 61% of all usage (compared to 30% domestic and 9% agricultural) (Bassil, 2012). Addressing inefficiencies in irrigation in particular – for instance, reducing open channel irrigation practices – stand to benefit the entire water system. This highlights the interconnected nature of infrastructure and services across urban-rural boundaries.

Institutional arrangements

Institutionally, the MoEW is responsible for water, sanitation and irrigation. In 2000, a water law (Law 221)[79] was passed which provided for four Regional Water Establishments (RWEs) covering the Lebanese territory.[80] Planning and policy responsibility remains with the MoEW. Whilst the RWEs were intended to 'consolidate provision, wastewater management and irrigation across

79 Law No. 221/2000 on 26 May 2000; rectified by Law No. 241/2000 on 7 August 2000; amended by Law No. 377 on 14 December 2001.

80 The RWEs are: RWE of Beirut and Mount Lebanon, based in Beirut; RWE of North Lebanon, based in Tripoli; RWE of Bekaa, based in Zahleh; RWE of South Lebanon, based in Saida.

their geographies' (Walnycki and Husseiki, 2017), the inability to collect revenue combined with a baseline of poor water resource management and prevalence of informal water sources and providers have challenged the RWEs meaning that, in many cases, water services fall to the municipalities (Ibid) with their own water committees.

A National Water Sector Strategy was endorsed in 2012; an updated version which for the first time addresses climate change and watershed management considerations, including mechanisms to address the water deficit such as improved surface water collection is currently pending approval by the Council of Ministers.

City level

Municipalities in the ten cities reported reliance predominantly on the public network for potable water, with seven also relying on artesian wells (Table 23). In regard to the state of the water network in the municipalities of the ten cities, the majority self-reported 'acceptable' or 'good' conditions. In the context of 23% of municipalities nationally reporting 'bad' network conditions, five municipalities across four of the ten selected cities (Beirut, Zahleh, Saida, Nabatiyeh) reported networks in 'bad' condition. The responses potentially offer a geographic steer, in triangulation with other MoEW and RWE data, for targeting scarce network upgrading resources.

City	*Potable water source (1,021 responding municipalities)*					*State of the water network (602 responding municipalities)*		
	Public network	*Artesian well*	*Water point*	*Gallons purchase*	*Other*	*Bad*	*Acceptable*	*Good*
All responding municipalities by city								
Tripoli	3	3	1	2	0	0	2	1
Beirut	17	3	2	6	1	2	7	7
Jounieh	2	0	0	1	0	0	1	1
Byblos	1	0	0	0	0	0	1	0
Baalbek	2	2	0	1	0	0	2	0
Hermel	1	1	0	0	0	0	1	0
Zahleh	1	0	0	0	0	1	0	0
Saida	6	8	0	1	1	1	3	2
Tyre	1	2	1	0	0	0	1	0
Nabatiyeh	3	2	0	1	0	1	2	0
All responding municipalities in Lebanon								
Count	602	489	210	235	64	139	341	122
%	59	48	21	23	6	23	57	20

Table 23 Potable water sources existing and state of water network among the municipalities making up the UN-Habitat-defined 10 selected cities. *Source:* Lebanon Central Inspection & Ministry of Displaced (2021).



Photo in Beirut. ©UN-Habitat, 2019

In terms of a subnational breakdown of water bill collection rates by regional water establishments, estimates as at 2015 varied between 62% for BML RWE to 18% for the Bekaa RWE (Fanack, 2015). There may be scope for learning transfer across the RWEs underway informed by this variation; there could further be value in a focus on urban-rural differentiation within the RWEs to identify and possibly scale up nuances related to tariff payment that map onto the urban-rural divide

City municipalities group discussion

Inter-municipal collaboration on water?

City municipality survey respondents considering their cities' intermunicipal collaboration on aspects of sustainable urban development reported current collaboration **on 'water supply' in five** cities (Tripoli, Byblos, Hermel, Baalbek, Tyre) (Table 16). Tripoli City reported the formulation of a water coordination project for the municipalities of Beddaoui and Nahle in the early 2010s though this did not reach implementation. However, a number of cities emphasized that water is now a centralized service (Nabatiyeh; Jounieh) (noting that water supply and irrigation are officially under the mandate of the RWEs) leaving limited scope for city-level coordination between municipalities. This stands in contrast to the abovementioned engagement by some municipalities in water management issues, indicating a national patchwork of institutional mechanisms in need of standardization in the interests of transparency, accountability and public service efficiency.

Ways forward

- Within the framework of the emerging National Water Sector Strategy, rationalization of the patchwork of institutional responsibilities for the water sector and phased steps to moving from the current configuration to the new arrangement should be undertaken through deliberations between MoEW, the RWEs and municipalities and other stakeholders. The challenges facing the water sector require clear leadership of the type that that this may allow.
- Noting that there is no comprehensive mapping of the water coverage of the four RWEs to assess gaps, a complete mapping of the network to identify then prioritize remaining areas not currently served, not served by adequate quality water, or where network condition is particularly poor, such as reported through the IMPACT municipal survey noted above may support optimum targeting of interventions. The exercise could also be used to support targeting of water losses in the network by mapping holistically the cause by area (lack of maintenance; illegal connections etc).
- Whilst water network coverage is on average higher in urban as opposed to rural settings in Lebanon, the concentration of slum-like living conditions in the cities with attendant water access deficits requires targeted interventions to support SDG 6 progress. The vulnerable urban hotspots identified under the Poverty section of the current report, spanning poor neighbourhoods and Palestinian camps, are potential geographical areas in need of such attention from a 'leave no-one and no place behind' perspective.
- In light of the relatively high level of trust placed by communities in municipalities relative to other state entities, MoEW and RWEs may wish to support municipalities as vehicles to raise demand-side awareness on water conservation rationales and techniques, potentially with a first focus on city municipalities due to their population densities and thus potential impact.
- Recent attention to the public health value of access to water and sanitation accompanying the global COVID-19 response stands to be leveraged to advocate for national and donor support to hard and soft water system improvements, noting the likely fall in tariffs from an already low baseline due to rising poverty.
- Like other utility sectors, rectifying water fees to take into account the current local currency devaluation will be needed as part of a wider package of adjustment measures including RWE staff salaries in the face of increased living and commuting costs if the sector is to approach sustainability in the future.

Wastewater

National

The main functions of a sanitation system are protection of human health and of environmental quality. Wastewater treatment remains one of the greatest public policy challenges Lebanon faces. Relative to post-war investment in water supply and sewage networks, wastewater treatment received less attention, against a prevailing perception of lower willingness to pay for wastewater management as opposed to potable water systems at the level of populations and administrations (Geara et al, 2010).

The public wastewater network in Lebanon at 2012 covered 60% of buildings, which was higher than the MENA regional average of 48% (Bassil, 2012). Households off-network use ground cesspits or septic tanks which are typically permeable with attendant pollution of the natural environment and contamination of groundwater sources. Also on 2012 figures, it was estimated that 8% of wastewater entering the wastewater network nationally was actually being treated – much lower than the 32% MENA average (Ibid). The remaining is discharged into open lands or in watercourses (MoE, 2014). A number of wastewater treatment plants (WWTPs) exist across Lebanon, though several are functioning below design



Photo in Tripoli. ©UN-Habitat, 2018

6 CLEAN WATER AND SANITATION

Target 6.2 Adequate and equitable sanitation

Indicator 06:02:01 Proportion of population using safely managed sanitation services

16% (2020) **17%** (2019)

Source: Lebanon SDG Monitor (ESCWA, 2021b)

capacity often due to insufficient volumes of input from the sewage network feeding them; and some are not functioning at all.

Against antecedent population growth and ongoing proportional urbanization, the Syrian refugee influx from 2011 has been linked to a significant rise in wastewater: a report estimated from 2011 'an increase in wastewater generation between 34 and 56 million m3 by the end of 2014, corresponding to an increase in the national wastewater generation rate between 8 and 14 percent' (MoE 2014:5).

ESCWA's data portal logs against SDG 6.2.1 that only 16% of the population use safely managed sanitation service as at 2020. Elsewhere, it has been estimated that 19.3% of the urban population in Lebanon are living without safe, private toilets (Burgess, 2016).

Wastewater is under the mandate of the Regional Water Establishments; however, like the water supply sector discussed previously, this role is not fully executed with municipalities undertaking functions in some places. For instance, the RWE for Beirut and Mount Lebanon does not have a wastewater department to address service delivery in the area; instead the function is defaulted to Beirut Municipality for which resources are inadequate. Large infrastructure projects are usually implemented by CDR. Some of the WWTPs, such as that in Zahleh, are still under the custody of CDR pending handover to the RWE for Beirut and Mount Lebanon despite it already being operational.

City level

At the level of the governorates containing the ten selected cities, there is wide geographical variation in wastewater network coverage and thus in household sanitation means (Table 24).[81] The data shows that 100% of households in Beirut Governorate were linked to the public sewage system, compared to a very low 35.5% in Nabatiyeh. Nabatiyeh is then heavily reliant on septic tanks (64.2% of households). Over half of households in Hermel Governorate (52.5%) also rely on septic tanks. In the context of low network coverage and reliance on polluting septic tanks in Nabatiyeh and Hermel governorates, there is an imperative to ensure that the rapid growth of their main cities (Nabatiyeh City which expanded by 357% over 1990-2021; and Hermel City which expanded by 250% over that period) is accompanied by drastic shifts towards networked wastewater handling solutions.

Governorates	*Sanitation means*				
	Public sewage system (%)	*Open sewage system (%)*	*Septic tank (%)*	*Other source (%)*	*Total (%)*
Akkar	62.3	8	29.7	0.1*	100
North	80.7	2.3	17	-	100
Beirut	100	0.0*	-	-	100
Mount Lebanon	78.3	0.4	21.3	0.0*	100
Baalbek-Hermel	47.1	0.4*	52.5	0.0*	100
Bekaa	66.3	10.8	22.9	-	100
South	69.5	1.2	29.2	-	100
Nabatiyeh	35.5	0.3*	64.2	-	100
Lebanon	72.9	1.7	25.4	0.0*	100

*Percentage represents an estimation below 800 of the absolute value with a standard error above 20%

Table 24 Households by sanitation means at governorate level. *Source:* CAS and ILO, 2019.

Table 25 provides insights into sanitation and wastewater network indicators for disadvantaged neighbourhoods profiled within the cities. Use of improved sanitation across households ranges from a low of 65.2% in profiled neighbourhoods in Baalbek to a high of 98.1% in Zahleh. The area of streets with malfunctional wastewater networks ranges as high as 42.9% for the profiled neighbourhood in Jounieh. An absent or malfunctioning wastewater connection was found to affect up to 12.7% of profiled neighbourhood residents in Tripoli. These figures are not intended to be representative of the city, but are highlighted to convey a sense of the policy-relevant

81 Data is derived from the Living Conditions and Household Survey 2018-2019 (CAS & ILO, 2019) Data Table 14.

internal heterogeneity of cities relative to averaged metrics at higher spatial scales.

City	Use of improved sanitation (by number of residents (%)	Streets (by area) with malfunctional wastewater network (%)	Buildings with blocked or no connection to the wastewater network (%)
Tripoli	78.1-93.3%	17.1-51.4%	9.2-12.7%
Beirut	78.5-98.4%	10.4-37.2%	2.8-13.3%
Jounieh	No data	42.9%	0%
Byblos	No data	No data	No data
Baalbek	65.2-87.7%	7.6-39.9%	0.5-17.8%
Hermel	No data	No data	No data
Zahleh	98.1%	1.60%	1.7%
Saida	95.8%	13.9%	3.9%
Tyre	97%	34.2%	5.5%
Nabatiyeh	No data	No data	No data

Table 25 Wastewater indicators for disadvantaged neighbourhoods within the selected cities. *Source:* UN-Habitat and UNICEF, 2018-2021.

Wastewater treatment plants

Coverage by wastewater treatment plants serving of areas in and around the ten selected cities is shown in Table 26. WWTPs exist for eight of the cities. Of these, four WWTPs are operation below design capacity;[82] one city is only partially covered (Beirut); and one (in Baalbek) is not operational at all. Two cities have no WWTP (Jounieh; Hermel) though one is under design for Hermel.



Photo in Tripoli. ©UN-Habitat, 2017

City	Wastewater treatment plan status	
	Exists?	Operational?
Tripoli	Yes	Yes (but operating below design capacity)
Beirut	Yes [South, West, Solidere (downtown)]	Yes
Beirut	No [North, East]	-
Jounieh	No	-
Jounieh	Yes	-
Byblos	Yes	Yes
Baalbek	No	No
Hermel	No (but in design phase)	-
Zahleh	Yes	Yes (but operating below design capacity)
Saida	Yes	Yes
Tyre	Yes	Yes (but operating below design capacity)
Nabatiyeh	Yes	Yes (but operating below design capacity)

Table 26 Wastewater treatment plant status of each city. *Source:* UN-Habitat desk review, 2021.

City municipalities group discussion

Inter-municipality collaboration on wastewater?

City municipality survey respondents reported the existence of inter-municipal collaboration on **wastewater management** in six cities (Tripoli, Beirut, Jounieh, Byblos, Baalbek, Tyre) and of weaker collaboration on the issue in a seventh (Nabatiyeh). Beirut City considering this sector as the key priority for collaboration among all the infrastructure and service sectors. Indeed, of all infrastructure and services themes, wastewater management is the one for which most cities report current inter-municipal collaboration.

The geography of connections networking sources and sinks combined with the local topography in principle drives municipal coordination need (noted by Jounieh, Nabatiyeh, Byblos). However, it was highlighted that WWTPs are the responsibility of central government's RWEs rather than of the municipalities (noted by Zahleh); yet that in some cases municipalities are overriding the municipal law to facilitate the necessary coordination, with decentralization of decision-making potentially a remedy (Beirut); that coordination projects are facing management challenges (Tripoli, with regard

82 This may be for reasons of inadequate wastewater inputs into the WWTP due to limited feeder network coverage; or due to 'a tendency for over-sized plant design with treatment capacity greater than what is needed' (Pseau, 2021).

to a recent Beddaoui-Nahle wastewater project); and that - for this infrastructure sector and others - MoIM could take a stronger lead in 'grouping' municipalities together based on infrastructure and service delivery needs (noted by Beirut).

Ways forward

- As population and water use continue to rise in Lebanon, it is increasingly urgent for public health and environmental reasons to redress the historic neglect of the wastewater treatment sector. Public policy effort to move from geographically patchy to equitable network coverage is required. The operational phasing of such efforts should ideally take place as part of a national spatial development framework, through which capital investment in network gap-filling should be temporally and spatially coordinated with anticipated growth in population and employment and thus solve for the future.
- Non-operational WWTPs should be re-animated, with necessary technical maintenance and repairs supported. Approaches to increasing treated water volumes from WWTPs operating below design capacity due to inadequate feeder connections should be formulated.
- Mechanisms to avoid or reduce the channeling of stormwater, industrial wastewater and other effluents into the wastewater network at street level in cities – a common situation – would help limit damage to the respective recipient WWTP.
- Credible transition mechanisms to move from septic tank reliance to networked sanitation need to be formulated then applied particularly in Nabatiyeh and Baalbek-Hermel governorates. The urban concentrations in these governorates may offer efficient entry points for RWEs to implement such transitions, with urban densities offering economies of scale on per capita costs.[83]
- Data on household-level wastewater connections should be acquired and analyzed at a range of spatial scales, including at sub-city areas to identify communities furthest behind in terms of access to services, noting that inadequate access to water and sanitation is one characteristic of a slum. The foregoing has highlighted that whilst governorate-level data shows 100% network coverage by household for Beirut Governorate, profiles of selected disadvantaged neighbourhoods found that the share of buildings with no connection or a blocked connection ranged across the neighbourhoods up to 13.3%.
- Similar to the water sector, the institutional division of roles between RWEs and municipalities stands to be clarified.
- In light of the need for water conservation to redress the overall water deficit noted in the Water section of this report, options for wastewater reuse should be considered. These may help cities adapt to climate change by constituting an additional source of water.
- Of all infrastructure and services themes, wastewater management is the one for which most city municipalities across the ten selected cities reported current inter-municipal collaboration. Experience in strategic coordination stands to be capitalized upon to contribute to more sustainable wastewater management in cities.

Solid waste

National

Good solid waste management (SWM) is critical to public health and environment and, in Lebanon's mixed nationality setting, it also supports social stability (UNDP, 2021). It has been estimated that the country generates around 7,200 tons of municipal solid waste per day, of which 48% is land-filled, 29% openly dumped, 15% composted and only 8% recycled (RAWMEC, 2021). These figures are at best rough estimates. For the recycling component, the damage to Beirut City's composting and sorting facilities at Karantina caused by the Beirut Port explosion means the current reality is likely lower.

Volumes of waste are on the rise in a context of population growth, and its composition is increasingly complex. Pressure on the sector has been added by the influx of Syrian refugees from 2011.[84] Further, it has been suggested that municipal solid waste volumes may increase relative to 2018 levels on the basis that the volume per capita produced is, at 1.05kg/day, well below the EU average of 1.32kg/day (Arthur D Little, 2018).[85]

The recent history of SWM in Lebanon across successive governments is fraught with severe governance and service delivery deficiencies, peaking in 2015 when the closure of the landfill site serving Beirut and Mount Lebanon led to a waste crisis focused on those areas that saw garbage piled up in streets causing a public health hazard, compounded by an air quality crisis from widespread spontaneous burning. An emergency solution consisting of the construction of two coastal landfills was instigated, which attracted criticism from an environmental

83 Whilst data is not available, it is likely that the major urban concentrations are less likely to rely on septic tanks than smaller urban concentrations or rural areas in these governorates.

84 At 2014, the influx of Syrians had been estimated to generate an additional yearly quantity of solid waste of 324,568 tons per year, or the equivalent of 15.7% of the volume generated by Lebanese prior to 2011 (MoE, 2014: 2).

85 Internationally, country level income is correlated with waste generation per capita. The current economic depression in Lebanon may slow any rise in waste generation per capita.

perspective. One of these landfills reached capacity in April 2020 and the other is approaching saturation without a follow-up plan in place. Symptomatic of the growing challenge of SWM, a survey (MoE and UNDP, 2017) identified an extensive 941 open dumpsites containing both municipal waste and construction and demolition waste across Lebanon, up from 670 in 2011. Many of these unregulated dumps are openly burned on a regular basis with resulting adverse air quality and health implications.

Solid waste collection in Lebanon is largely in the hands of municipalities and their UoMs. Following the 2015 waste crisis, which was partly seen as a product of overcentralized management, the Council of Ministers notably advocated that local government and particularly municipal unions be given greater powers to manage and treat solid waste (DRI, 2017:8), tacitly acknowledging the pool of strategic coordination capacities at the level of UoMs that stand to be further utilized. SWM is already a priority issue for most unions (Ibid:4). In 2017, 80% of surveyed unions specified a need for additional staff for this sector (Ibid). Unions currently undertake direct waste collection and management of treatment facilities as well as awareness-raising campaigns about waste reduction. Interviewed union presidents expected the role of unions in SWM to grow in the future.

The government's IMPACT survey of municipalities (Lebanon Central Inspection & Ministry of Displaced, 2021) assessed which entity handles their waste collection. Municipalities themselves make up the largest share (46%) followed by UoMs (31%). Private companies handle 14% of waste collection, and 9% is accounted for by 'other' entities (Figure 15).

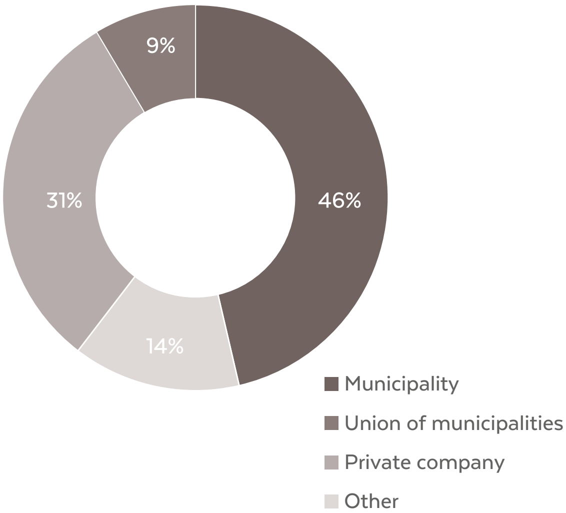


Figure 15 Share of waste collection handling by entity among municipalities nationally, based on responses from 960 of a total 1,148 municipalities responding to the survey. *Source:* Lebanon Central Inspection & Ministry of Displaced (2021).



Photo in Beirut. ©UN-Habitat, 2019

Despite the financial burden of waste management, 75% of municipalities do not have a funding source of their own for SWM, relying instead on central government's IMF and donor assistance.[86] This suggests the need to structure the service in a financially sustainable way (DRI, 2019:3) potentially incorporating user cost recovery. Whilst some research has suggested willingness of households to pay directly for SWM management, this avenue has not been pursued and Lebanon remains one of the few countries internationally where households are not directly tariffed for SWM services.

The country's first Integrated Solid Waste Management (ISWM) framework law was passed in 2018. It promotes the '4R' principles of 'Reduce, Reuse, Recycle and Recover'; seeks the closure of open dumpsites; advocates for increased reliance on sanitary landfill; and promotes waste-to-energy initiatives. It has not however been implemented.

86 Against this backdrop of scarce resource, sanitary landfills are typically sited by financially incentivizing municipalities to accommodate them in their areas by offering bonus transfers from the IMF.

City level

A subnational breakdown of solid waste generated at governorate level shows that over half the country's tonnage is derived from Beirut and Mount Lebanon (Table 27).

	Solid waste	
Governorate	*Tons/day*	*Percent*
North & Akkar	1,400	20
Beirut & Mount Lebanon	3,700	53
Bekaa & Baalbek-Hermel	1,050	15
South & Nabatiyeh	1,050	15
Lebanon	7,200	100

Table 27 Solid waste generation by governorate. *Source:* Recycling and waste management exhibition and conference (RAWMEC) website, viewed Sep 2021.

Focusing only on the subset of municipalities making up nine of the ten selected cities (Tyre city municipalities were not respondents to this question), waste collection is undertaken by varying configurations of entities from city to city (Table 28). The national dominance of municipalities as waste handling entities is reflected at city level for five cities (Byblos, Baalbek, Hermel, Zahleh and Nabatiyeh). Jounieh, Tripoli, Beirut and Saida rely heavily though not exclusively on private companies. Two cities (Tripoli and Saida) rely on their UoMs for waste collection. Results interpretation should acknowledge that only 48 of the 69 municipalities making up the ten selected cities responded to this question.

City	*Entity handling waste collection*			
	Municipality	*Union of municipalities*	*Private company*	*Other*
Tripoli	2	1	3	0
Beirut	2	0	10	5
Jounieh	0	0	1	0
Byblos	1	0	0	0
Baalbek	2	0	0	0
Hermel	1	0	0	0
Zahleh	1	0	0	0
Saida	2	4	3	0
Tyre	*	*	*	*
Nabatiyeh	2	0	0	0
No. of municipalities nationally who responded (960 out of 1148 in database)	445	135	298	82
% of 960 responding municipalities	46	14	31	9

* No response to this question

Table 28 Share of waste collection handling by entity among municipalities, based on responses from 960 municipalities responding to the survey. *Source:* Lebanon Central Inspection & Ministry of Displaced (2021).



Photo in Saida. ©UN-Habitat, 2017

Regarding recycling, cities were questioned on whether their solid waste underwent secondary sorting, whereby recyclables are separated out. Table 29 shows that secondary sorting is operational for Tripoli, Zahleh and Tyre, and that a fourth facility, in Saida, exists but has been frozen due to current crises.

City	Served by secondary sorting facility?	Operational?
Tripoli	Yes	No
Beirut	No	-
Jounieh	No	-
Byblos	No	-
Baalbek	No	-
Hermel	No	-
Zahleh	Yes	Yes
Saida	Yes	No
Tyre	Yes	Yes
Nabatiyeh	No	-

Table 29 Cities served by solid waste secondary sorting facility? *Source:* UN-Habitat, 2021..

The IMPACT survey of municipalities also queried municipalities on the existence of waste sorting and recycling in their area. Few municipalities responded to this question so the results are unlikely to provide a reliable picture. However, for the municipalities in the ten selected cities herewith, seven municipalities in Saida City self-reported the existence of waste sorting and recycling; six in Beirut; three in Tripoli, two in Nabatiyeh, and one each in Zahleh, Baalbek and Byblos.

City municipalities group discussion

?

Inter-municipality engagement-on solid waste management?

City municipality survey respondents reported current collaboration on 'solid waste management' in five cities (Tripoli, Byblos, Zahleh, Baalbek, Tyre) (Table 16).

- A Jounieh City municipality (Zouk Mkail) noted progress on sorting from source and sale of resulting recyclables, a potentially scaleable good practice in terms of value chain creation.
- Tripoli City noted that a planned recycling facility that has been consulted on multiple times and had been operational intermittently is currently non-operational.
- Zahle, the city with the highest proportion of Non-Lebanese by far (47.6% Non-Lebanese; all Syrian), noted the challenges posed by the solid waste increment from its Non-Lebanese population.

Subnational integrated solid waste management approaches

Partners to the Lebanon Crisis Response Plan have reported their engagement with the SWM sector,[87] recording the number of municipalities they have supporting in using or implementing integrated SWM approaches. For the period Jan 2020 to Oct 2021, Table 30 shows a concentration of such cases in the governorates of Bekaa (43) and Baalbek-Hermel (18).

LCRP indicator: 'No of municipalities using / implementing integrated SWM approaches'	
Governorate	Municipalities count
North	2
Beirut	0
Mount Lebanon	1
Baalbek-Hermel	18
Bekaa	43
South	11
Nabatiyeh	1

Table 30 'No. of municipalities using / implementing integrated Solid Waste Management approaches' reported by Lebanon Crisis Response Plan partners for the period 1 Jan 2020 to 1 Oct 2021. *Source:* Inter-agency Coordination Lebanon, 2021.

Notably, Tyre UoM has a Solid Waste Management Profile and an evidence-led integrated plan, produced with UN capacity support to the UoM's technical office.

Ways forward

The need to expedite adoption of the 2018 Integrated Solid Waste Management framework law; establish a sustainable financial model for SWM focused on local authority funding and possibly involving household tariffs; design a credible route out of widespread unregulated dumping and burning of waste by municipalities in alignment with environmental conventions; and reduce the fraction of waste bound for landfill are all widely acknowledged requirements. Spatial and urban insights may be added, noting that the spatial units of SWM do not align to city units:

- Cities are the key generators of municipal solid waste by virtue of their population concentrations, particularly in highly urbanized Lebanon. Public awareness-raising campaigns may be targeted towards cities on the '4Rs' identified in the 2018 Integrated Solid Waste Management (ISWM) framework law, even pending its implementation.
- Multisectoral data-gathering to support city-level urban planning should be capable of supporting SWM strategy design and baselining, particularly in terms of population counts as factors of waste volume; and mapping existing spatial service coverage and

87 Under the Lebanon Crisis Response Plan, the Social Stability sector coordinates partners supporting municipalities implementing/ using integrated solid waste management systems and approaches, as a route to mitigating intercommunal tensions through participatory public service delivery enhancement.

gaps across neighbourhoods and streets to ensure equitable service access among communities.

- Solid waste management demands cooperation across jurisdictions to link sources and sinks, including at scales beyond the city. Local government has been allocated a leading role in SWM. Capacity-building of municipalities to collaborate across municipal boundaries within their cities as advocated in this report also stands to benefit SWM as an inherently inter-municipal endeavour.
- This report has delimited the main cities through a common method and suggested a common set of multi-sectoral data with a view to supporting inter-city comparisons and learning exchanges. The foregoing has identified instances of good practice that may be shared, including waste sorting and recycling as well as value recovery from waste at municipal level. Ways to set in motion circular economies related to extracting value from waste with explicit livelihoods objectives stand to be further explore, potentially in the context of public-private partnerships.
- The medium and long-term vision for SWM, holistically linking sources and sinks spatially and siting facilities including sanitary landfills should ideally be integral to a participatively produced national spatial development framework.

Electricity

National

Lebanon's power sector, under the purview of the MoEW, is characterized by chronic failings that have contributed to and exacerbated the economic crisis since 2019. The national utility provider, Electricite du Liban (EDL) has been a heavily subsidized, loss-making public utility with an extremely low cost recovery rate of 27% compared to the MENA region median of 90% (AUB, 2017), enormously high operational costs ($0.29/KWh compared to the MENA average of $0.08/KWh (Ibid)) with network losses a significant contributor to the cost of supply. Daily cuts in public power supply since the civil war has left a demand vacuum into which supplementary informal electricity generation has established itself, mainly in the form of private generators feeding ad-hoc neighbourhood-level grids, which are largely unregulated. A private generators' lobby exists that is resistant to change; and generator-related air and noise pollution as well as unsafe power cabling in neighbourhoods abound. Both public and private power generation is heavily dependent on imported heavy fuel oil and diesel, with very limited progress towards cleaner or renewable energy sources.

Public power supply tariffs have long been capped, having gone without revision since the mid-1990s. This is itself a contributor to the limited ability of EDL to operate, manage and maintain the power sector. In the current economic depression and local currency devaluation, private generator fees are skyrocketing. The two-track energy supply format is thus out of reach for an increasing portion of households and businesses, leading to a decline in equitable access to electricity.

In the context of increasing costs of imported fuel and decreasing availability of public utility maintenance funds, EDL is facing the spectre of ever more intermittent supply. All governorates are now experiencing public power supply cuts sometimes in excess of 22 hours per day (ESCWA, 2021). As for SDG 7.1.1 indicator 'Proportion of population with access to electricity' (see box), the score showing almost complete coverage does not factor in the daily power cuts that have characterized supply for decades. CAS and ILO (2019) also reported 'availability of electricity' at household level to be in excess of 99.4% across all governorates.

7 AFFORDABLE AND CLEAN ENERGY

Target 7.1 Access to affordable and clean energy

Indicator 07:01:01 Proportion of population with access to electricity

99% (2018)

98% (2012)

Source: Lebanon SDG Monitor (ESCWA, 2021b)

The falling reliability of the public power supply and costs of neighbourhood-level private generator subscriptions is creating a grassroots appetite for decentralized energy generation at the level of households and businesses, with a focus on private solar panels. Interest in decentralized energy supply also has drawn the role of municipalities to attention. For instance, a parliamentary bloc "Lubnan Al Kawi" has proposed a law to allow decentralized energy production and distribution by municipalities (An-Nahar, 2021) though traction has been limited to date. In all scenarios, deliberations on decentralized energy should emphasize the need for a renewables dimension. The government's e-platform IMPACT collated municipalities' views on the state of the power grid in their areas (Lebanon Central Inspection & Ministry of Displaced, 2021). Based on 910 responses, 17% reported the 'existence of alternative energy'. Of these, 73% comprised solar power.

The same IMPACT survey also showed that 16% of municipalities considered the power grid in their area to be in a 'bad' state, whilst 25% reported their lighting networks to be in a 'bad' state (Ibid).

City level

The IMPACT municipalities survey gained responses from only 36 of the 69 municipalities making up the ten selected cities. Of these, three reported power grids in a 'bad' state. Of the 156 (17%) of municipalities nationally reporting the 'existence of alternative energy', only eight of these are in the ten selected cities, where they comprise a mix of 'solar' and 'other' renewable energy sources (Table 31).

City	Existence of alternative energy - No. of responding municipalities	Municipality	Type
Tripoli	1	Ouadi El-Nahle	Solar
Beirut	2	Roumie	Other
		Sinn El-Fil	Solar
Jounieh	0	None	None
Byblos	1	Jbeil	Solar
Baalbek	1	Baalbek	Solar
Hermel	1	Hermel	Solar
Zahleh	1	Zahle Maalaqa	Other
Saida	1	Saida	Solar
Tyre	0	None	None
Nabatiyeh	0	None	None

Table 31 Alternative energy existence as reported by municipalities making up each city. *Source:* Lebanon Central Inspection & Ministry of Displaced (2021).

City municipalities group discussion

?

Inter-municipality collaboration on electricity?

City municipality survey respondents reported current collaboration on 'electricity' in five cities (Tripoli, Byblos, Hermel, Tyre).

- Cities noted that power is under the mandate of central government (Baalbek) yet municipalities do coordinate to resolve daily issues emerging (Tripoli).
- Municipal support to securing fuel for private generators supplementing the government supply was also noted (Tyre).

Ways forward

Comprehensive recommendations on routes towards a sustainable power sector in Lebanon have been set out elsewhere, most recently by the World Bank (2020) in the form of a 'power sector emergency plan' and by ESCWA (2021) in the form of recommendations for reducing the contribution of power deficiencies to multidimensional poverty. Within the scope of this report, the interface with cities particularly in terms of actions amenable to urban planning are considered.

- The environmental effects of neighbourhood-level private generators in terms of noise and air pollution need to be scrutinized through an impact study, possibly under the guidance of the MoE, to support an evidence-led approach to mitigating these public health risks.
- Measures to increase urban safety related to hazardous and/or exposed wiring connections at street level and in common areas of buildings stand to be formulated and operationalized. Such approaches will need to navigate the tension between the illegality of private generators on one hand and the lack of alternative power options in the face of discontinuous public power supply on the other.
- Street lighting in urban area is a factor of urban safety, particularly for women and girls. Routes to improving street lighting in areas where its condition is poor should be identified, including through the use of renewable sources.
- Innovation and good practice on the use of renewable energy sources in municipalities including those referenced in table may be collated for dissemination and potential scale-up, as one of several potential inter-city learning exchange topics flagged across this report.
- The building code should be updated to foster improvements in the thermal efficiency of new buildings to reduce energy expenditure on heating and cooling. It may also seek to encourage the incorporation of renewables and energy-efficient technologies.
- In the context of a two-track power supply where neither track offers continuous service, the coverage of household connections to the public network is an insufficient measure of equitability of access. Contextually resonant metrics for measuring progress against SDG7 may be required to help frame actions.


Photo in Saida. ©UN-Habitat, 2017

Urban mobility

National

In spite of the existence of a national Law on Urban Planning (1983) and adoption by decree in 2009 of a National Physical Master Plan for the Lebanese Territory (DAR-IAURIF, 2005), urban mobility in Lebanon has not benefitted from a unified and harmonized conceptual framework to address urban transport and traffic issues through the lens of sustainable development. The lack of a regulatory framework to support a comprehensive approach multimodal urban mobility; relatively low density urban sprawl linked to rising distances between people, jobs and services and jobs; and the virtual absence of public transport options have led across Lebanon to the primacy of the individual car, with a resulting burden on society, economy and the environment.

Transport-related investments in and between Lebanese cities have been largely dedicated to road infrastructure expansion. In cities, there are poor facilities to ensure the mobility of vulnerable groups including pedestrians, cyclists, young and elderly people. This links to the dominance of land use and building regulations that favour provision for automobiles rather than pedestrians (eg street design that prioritizes cars as opposed to multi-modal transport mixes; limited car-free urban spaces; provision of car parking; building setbacks, widespread absence of sidewalks and street lighting; as well as almost complete disregard for people with special needs).

Transport modal split

Besides the city of Beirut where a tramway network represented the backbone of urban mobility until 1965, most Lebanese cities relied on a combination of buses, collective taxis ('services') and private cars until the start of the 1975-1990 civil war. During the war, multiple factors favoured the rising dependence on private cars for urban and interurban mobility. Factors included perceptions of unsafety in collective vehicles in a context of repeated checkpoint incidents; the spread of city residents to scattered towns and villages; and the subsidized cost of cars through low customs charges and other taxes.

From 1990, the predominance of the private car as the main mode of urban and inter-urban transport was reinforced by government investment in road network expansion. The budget spent on roads was significant: indicatively 24% of all CDR's infrastructure expenditure from 1992 to 2017 (Figure 16).

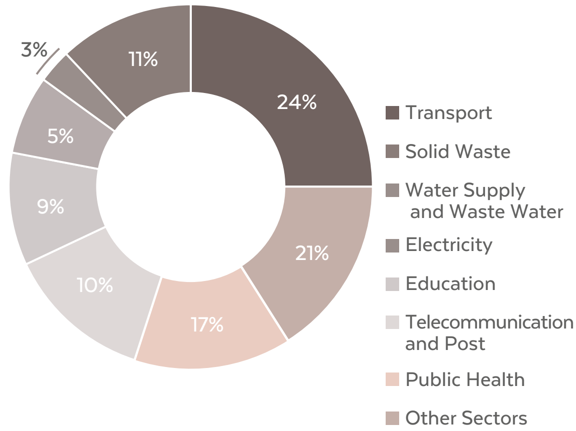


Figure 16 Share of Council for Development and Reconstruction's by value by sector over 1992-2017. *Source:* Council for Development and Reconstruction (2018).

Investment in road infrastructure and progressive disengagement of the government from developing conventional public transport modes propagated the car-based modal split, with cars having accounted for over 80% of daily trips in Beirut in 2009 (Figure 17). The self-reinforcing relationship between road expansion, car ownership and urban sprawl is apparent in Lebanon.

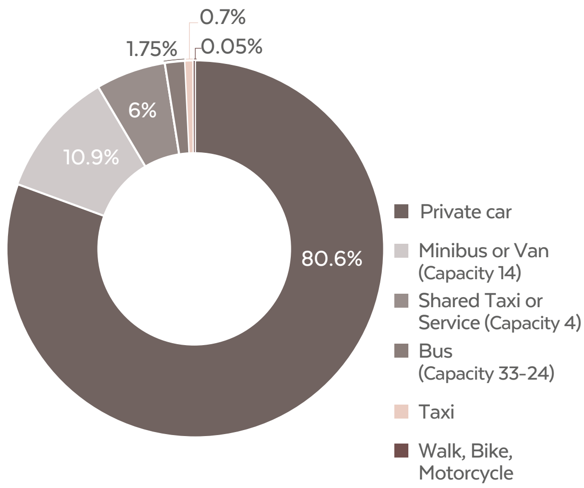


Figure 17 Modal Split in Beirut in 2009. *Source:* United Nations Development Programme and Global Environment Facility, 2018.

Municipalities asked to identify the main mode of public transport in their areas as part of the government's national IMPACT survey indicated taxis as the main mode (65%), followed by vans (25%) and buses (11%) (Lebanon Central Inspection and MoD, 2021; Table 33). An overwhelming 69% of municipalities reported the absence of dedicated bus stops (Ibid).

Despite the proportionally heavy investment in roads, their condition is not reliably good. The IMPACT survey found that 28% of municipalities nationally reported their main roads to be in 'bad' condition. The poor state of roads and public transport overall has been observed to present a material challenge to Lebanon's economic development (Chami, 2017).

Road transport is a major generator of pollution in the Middle East and Lebanon, with implications for local air quality, health and global climate change. The economic crisis in Lebanon and phased lifting of state fuel subsidies may stand to increase demand for non-private motor transport options.

Road Safety

With an estimated 18.1 fatalities per 100,000 population due to road traffic in 2016 (WHO, 2018), Lebanon is positioned below the world average of 18.2. However, the number of road traffic fatalities in Lebanon is showing a rising trend since 1980 (Figure 18).

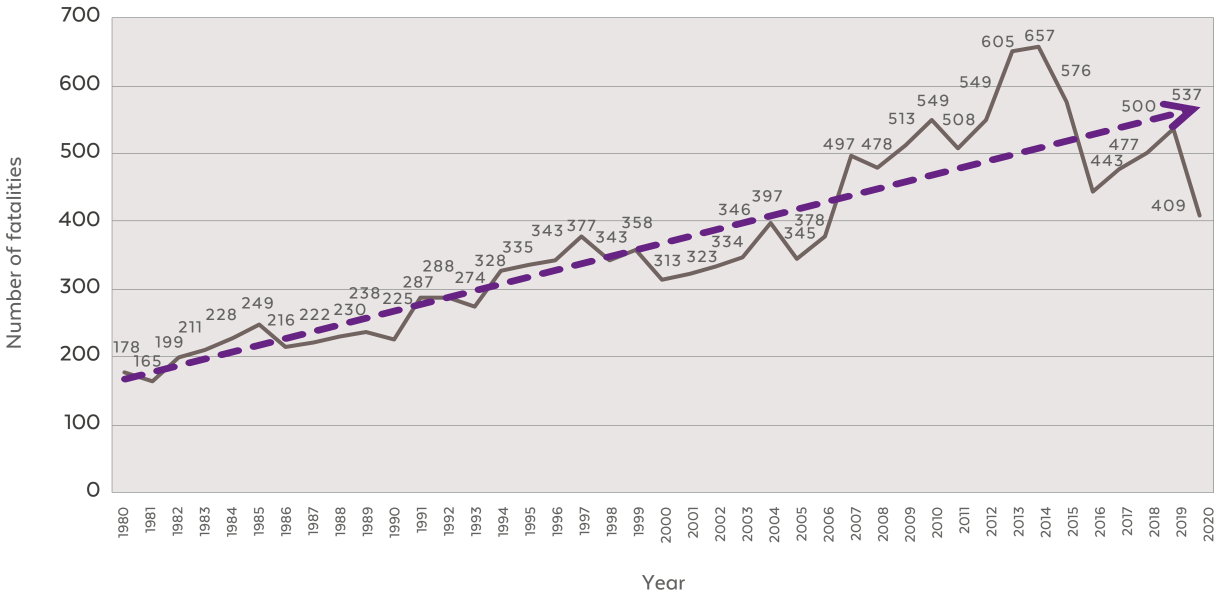


Figure 18 Fatalities due to road crashes in Lebanon over 1980 to 2020. *Source*: Economic and Social Commission for Western Asia (2021) based on data provided by Internal Security Forces in Lebanon.

In 2012, a new Traffic Law (No. 45) was passed. It included provisions involving reform of the road safety management system, the creation of a National Road Safety Council (NRSC) headed by the prime minister with an executive secretariat acting as the national lead agency for road safety, in addition to a technical committee headed by MOIM.

In 2015, an executive secretary was nominated for the NRSC, but no financial resources have since been allocated for its operation. However, the secretariat did succeed in implementing some normative activities stimulating recognition of the benefits of national coordination to establish road safety standards. A number of road safety awareness campaigns were also conducted.

As part of a $200 million World Bank 'Roads and Employment Project' for Lebanon signed in 2017, a $2 million is dedicated to supporting the NRSC to develop 'road safety master plans' for each of Lebanon's governorates as well as to implement selected road safety measures in collaboration with other donors (World Bank, 2017).

In 2021, ESCWA secured funding from the UN Road Safety Fund to implement a project on 'Strengthening evidence-based interventions for road safety in the Arab region through effective and reliable data recording, processing and analysis', with the participation of Lebanon, Tunisia and Qatar as implementing countries.

City level

Road conditions

The government's IMPACT survey of municipalities (Lebanon Central Inspection & Ministry of Displaced, 2021) found that the state of the roads was reported as 'bad' particularly in parts of Tripoli, Beirut, Saida and Nabatiyeh cities (Table 33).

Access to public transport

Data available for a subset of the ten cities estimates their residents' relative access to public transport (Table 32). Almost half of Zahleh's population is suggested to have public transport access, compared to around 8% in Baalbek. The value of such city-level metrics in investment targeting and advocacy is apparent; extension of the same analysis to other cities - possibly preceded by scrutiny of the generic method as applies to the Lebanese context - would offer a monitoring baseline as well as facilitate inter-city comparisons of the type that may help inform national transport policy directions.

11 SUSTAINABLE CITIES AND COMMUNITIES

SDG Indicator 11.2.1: Proportion of the population that has convenient access to public transport

*City**	*Percent*
Tripoli	30.9
Beirut	20.1
Jounieh	No data
Byblos	No data
Baalbek	8.2
Hermel	No data
Zahleh	49.0
Saida	24.4
Tyre	10.6
Nabatiyeh	No data

*City boundaries are defined using a different method to that used in the SoLC report and thus may vary.

Table 32 SDG Indicator 11.2.1: Proportion of the population that has convenient access to public transport. *Source:* UN-Habitat Urban Indicators Database, last updated Jul 2020, viewed Sep 2021. [88]

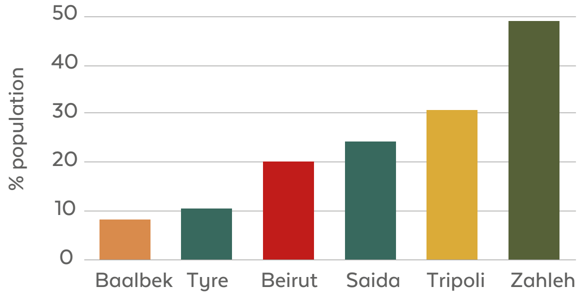


Figure 19 Proportion of the population that has convenient access to public transport disaggregated by age group, sex, and persons with disabilities (SDG Indicator 11.2.1). *Source:* UN-Habitat Urban Indicators Database, 2020.

Means of public transport self-reported by municipalities

At the level of municipalities in the ten selected cities, the main means of public transport self-reported by municipalities are shown in Table 33. Shared 'taxis' are the dominant mode in all cities. Only Beirut and Saida cite buses as a main means of public transport; the reported widespread lack of dedicated bus stops is not, then, surprising.

City	*Main means of public transport*			*State of the main roads - bad*	*Non-existence of dedicated bus stops*
	Taxis	*Vans*	*Buses*		
Tripoli	4	0	0	2	3
Beirut	15	6	3	1	13
Jounieh	1	0	0	0	0
Byblos	1	0	0	0	1
Baalbek	2	2	0	0	1
Hermel	0	1	0	0	1
Zahleh	1	0	0	0	1
Saida	7	1	3	2	8
Tyre	0	0	0	0	0
Nabatiyeh	2	0	0	1	2
Lebanon					
No. of municipalities reponding to this question out of all municipalities in database	751 out of 1,148	293 out of 1,148	124 out of 1,148	247 out of 882	799 out of 883
% of all responding municipalities	65	26	11	28	90

Table 33 Means of public transport, state of main roads and absence of dedicated bus stops among the municipalities making up the UN-Habitat-defined cities. *Source:* Lebanon Central Inspection & Ministry of Displaced (2021).

Road fatalities

At subnational level, Figure 20 presents the number of fatalities and injuries due to road crashes across the Lebanese districts in 2019. The highest number of fatalities were in Aakar, Baalbek, Metn, Zahleh and Chouf. In terms of road crash injuries, the districts of Metn, Beirut, Baabda, Zahleh and Saida had the highest count (Figure 20).

88 'This indicator is computed as share of population who live within a walking distance (along a street network) of 500m to a low capacity public transport system (eg bus, tram) and 1,000m to a high capacity public transport system(…). Only public transport stops which are mapped are included in the analysis which may include both formal and informal stops. Many cities (mostly in the developing countries) have informal public transport systems which are not fully mapped (…).' UN-Habitat Urban Indicators Database (2020).

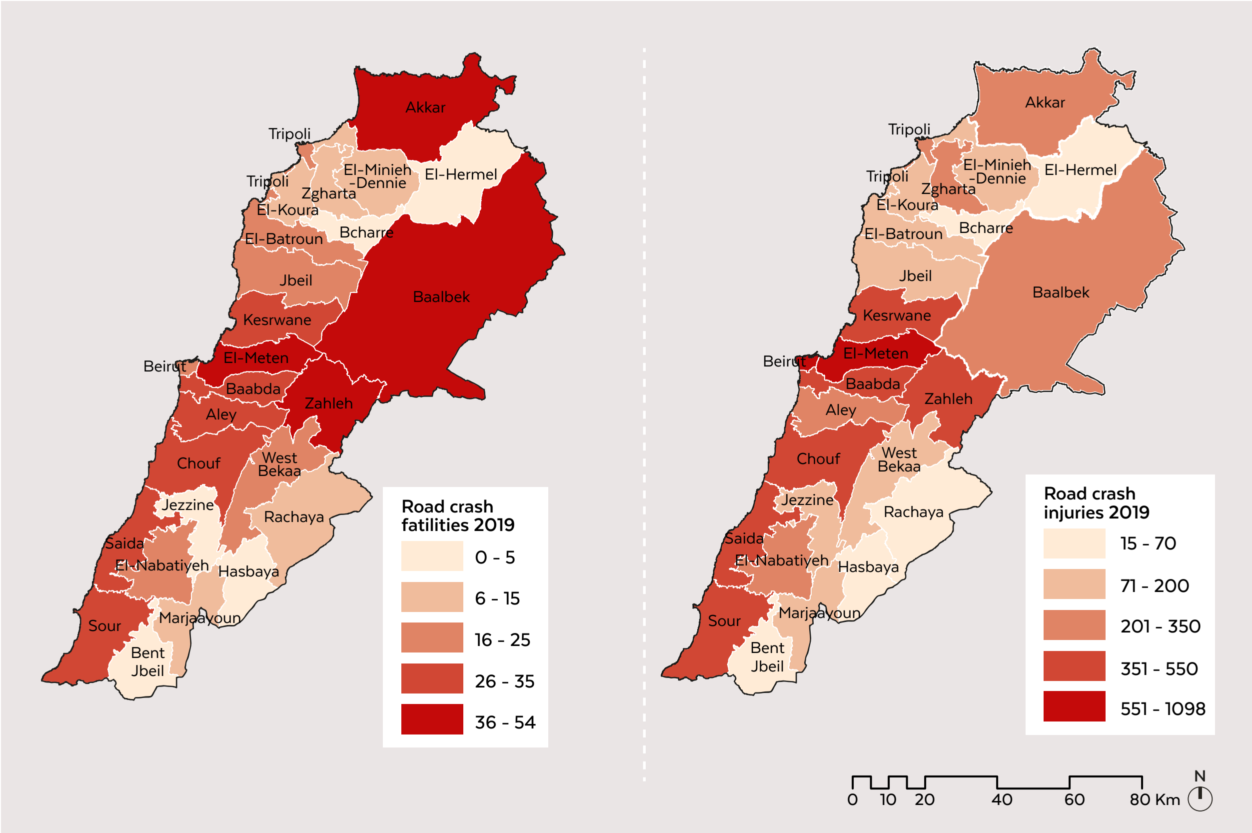


Figure 20 Fatalities due to road crashes in Lebanon over 1980 to 2020. *Source*: Economic and Social Commission for Western Asia (2021) based on data provided by Internal Security Forces in Lebanon.

Soft Mobility[89]

Local initiatives in Beirut and Tripoli have for the last several years raised awareness of the benefits of urban cycling as a form of sustainable mobility and for health benefits. The number of cyclists in Tripoli in particular, with its favourably flat topography, has anecdotally increased. Rising fuel costs combined with decreased purchasing power symptomatic of the current economic crisis may spur on the uptake of cycling.

In 2013, the Municipality of Beirut benefitted from technical support provided by the French Agency for Development (AFD) and Ile de France leading to a comprehensive diagnosis to support activating soft mobility through four pilot projects. The proposed projects promote walking and cycling with emphasis on mobility access for vulnerable groups including people with special needs (Sitram and Egis, 2013). The study proposed the development of two '30km/h zones' in Gemmayzeh and Hamra).[90,91]

In 2021, a bike-sharing initiative was launched in the city of Tyre, aiming to diversify accessible and sustainable mobility options across the city. The initiative was the result of a city-to-city partnership between the City of Zurich and municipality of Tyre (UN-Habitat, 2021).

Beirut focus

Transport modal split

The evolution from 1970 to 2009 from public to car-based transport, in the context of a dramatically falling car occupancy rate, is well-expressed in Beirut (Table 34).

	1970	*2009*
Shared taxi and minivan	72%	18%
Buses	8%	1.7%
Private car	20% (car occupancy rate 8.5)	80% (car occupancy rate 1.9)

Table 34 Share of modes of transport in Greater Beirut Area. *Source:* IRU (2016).

Road accidents by road user type

An analysis of road crashes in Beirut between 2013 and 2015 revealed that 39% of crashes were between vehicles and motorcycles; whilst 28% were between vehicles and pedestrians (Figure 21). The low adherence of cars and motorcycles to traffic rules and the absence of pedestrian-friendly urban design arrangements like sidewalks and protected pedestrian crossings are among the contextual drivers of these results in Beirut, which are

89 Soft mobility, also known as active mobility, refers to mobility modes involving manpower such as walking, cycling and rollerskating. Environmentally friendly modes such as e-scooters are sometimes also included.

90 The proposal was presented as part of activities of the Sixth UN Global Week for Road Safety (17-23 May 2021).

91 At the joint initiative of ESCWA, YASA and TMS Consult submitted to the Governorate of Beirut.

likely generalizable to most Lebanese cities. Implications point towards urban design that facilitates multi-modal transport including non-motorized mobility; as well as public awareness-raising on road usership conventions combined with appropriate enforcement against violations.

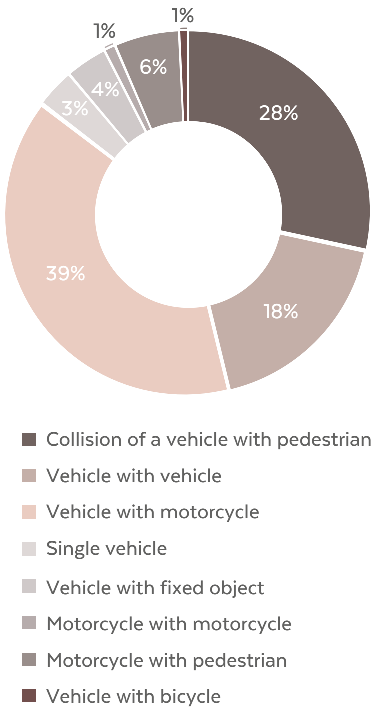


Figure 21 Entities involved in road crashes in Beirut between 2013 and 2015. *Source*: Abounoas (2017).

Bus Rapid Transit

Prompted by the severe deterioration of road traffic conditions in Beirut, Lebanon has recently considered a comprehensive programme of public transport in the Greater Beirut Area with assistance from the World Bank estimated at $295 million (World Bank, 2018)[92]. The project concerns the implementation of a Bus Rapid Transit (BRT) system (decreed in 2019) as a potential investment to improve mobility and traffic circulation. The BRT system network would consist of three trunk BRT lines in the centre of the highway on the Northern, Southern, and Eastern entrances to Beirut. In the first phase, the proposed project addresses the Northern Entrance, from Tabarja to Beirut with feeder bus routes alongside; then continues into the city of Beirut. The Beirut-focused first phase is framed as a step towards a national network.[93]

It remains to be considered if such an expanding transport operation can be designed to help mitigate the loss of livelihoods among the current transport providers (services, van, minibus drivers) that would accompany BRT's success.[94]

City municipalities group discussion

Inter-municipal collaboration on transport?

City municipality survey respondents reported current collaboration on 'urban mobility / transport' in two cities (Beirut, Byblos) and weak or limited collaboration in two more (Jounieh, Hermel) (Table 16).

- Cities noted the lack of public transport (noted by Tripoli, Tyre, Baalbek) though satisfaction with taxi-based public transport was also expressed (Baalbek).
- A further theme was that a public transport strategy that is already formulated (Tripoli) or transport-related design work in progress (Tyre) are facing funding barriers to implementation.

Ways forward

- The chronic lack of a comprehensive national transport policy and regulatory framework for Lebanon and its cities needs to be addressed urgently to guide the targeting of transport and mobility interventions in a sustainable and equitable way. Such a framework should constitute the transport dimension of an overarching multisectoral national spatial development strategy. It should factor in shared assumptions common to both documents about the spatiality of (1) current need and (2) future population and jobs growth so that public transport planning solves for the future.
- A dramatic shift in the transport modal mix is required in Lebanon, with particular regard to reducing private car trips and providing viable public transport and soft mobility options. The high costs and long timeframes associated with public transport infrastructure investment are a given; however, short term measures in support of the long term vision can be implemented. For instance, in a context of rapid city growth demonstrated in this report, urban lands for future public transport investment (eg old rail lands) should be identified and safeguarded from development pressure. Similarly, a long-term agenda to redesign streetscapes to favour non-car modes may be supported in the short term with tactical urbanism interventions such as car-free days or streets.
- The urban land use implications of a modal shift to public transport must be made explicit, particular in terms of (1) the walkability of urban environments to facilitate pedestrian/soft mobility

92 World Bank. (2018). Greater Beirut Public Transport Project. Report No: PAD2574. Beirut: World Bank.

93 The deterioration of the financial and economic situation in Lebanon and potential shifts in priorities could mean the future of this project is subject to re-negotiation between the government and World Bank.

94 For instance, livelihoods opportunities arising from the need to operate feeder links to the BRT could be actively targeted at current public transport providers.

onward journeys from public transport nodes; and (2) residential and workplace densities, in regard to which the urban planning system must deliver concentrations that support public transport infrastructure investment.

- Soft mobility interventions already in motion (Tyre, Tripoli, Beirut) require analysis with a view to distilling out good practice that may be scaled up. The rising cost of fuel alongside overall rising poverty characterizing Lebanon's current socio-economic crisis may render soft mobility an increasingly contemplatable option for more people.
- Concerning road safety, technical cooperation should focus on implementing the regulatory framework promulgated by the 2012 Traffic Law 243, to support the secretariat of the National Road Safety Council in elaborating a comprehensive national road safety policy and implementing the related road safety strategies and actions plans in line with the 'Global Plan for the Decade of Action for Road Safety 2021-2030' (WHO and the United Nations Regional Commissions, 2021).
- A programme of capacity building is needed to raise the awareness of staff at the national and municipal levels on the best practices to promote and implement public transport solutions, considering sustainable financial models including recourse to public-private partnership financing models. The UN-Habitat Guide for Mainstreaming Transport and Mobility in Lebanon's National Urban Policy (UN-Habitat, 2021g) offers support in this regard.


Photo in Tripoli. ©UN-Habitat, 2017

Public space

Public spaces enhance the quality of life of residents and visitors by providing civic fora for social interactions, promoting equity and social inclusion. They offer opportunities for physical exercise and, in cases, contact with nature to promote public health and wellbeing; and are particularly important in poor overcrowded neighbourhoods where private space per person is limited. Public space is necessary to the exercise of human rights in general though particularly of cultural rights, meaning policymaking for such spaces should follow a human rights approach (OHCHR, 2021). Open spaces can mitigate urban heat island effects where there is green cover and reduce surface run-off where permeable. Optimally balancing public open space provision with other urban land uses and planning principles, such as that of the compact city, is a key contribution of urban planning and design as a public service.

SDG 11.7

Aims to 'provide universal access to safe, inclusive and accessible, green and public spaces, particularly for women and children, older persons and persons with disabilities'. Access to open space is recognized as a requirement for the enjoyment of other human rights.

National

The foregoing section 'Urban space and population' has documented how development pressures on Lebanon's main cities has pushed out urban footprints at their peripheries. Similarly, pressure exerted on unbuilt plots including public spaces within the city perimeter can render them vulnerable to infill development, particularly where they are not protected by policy. In Lebanon, rapid and unplanned urbanization has in many cases taken place at the expense of public green spaces and other spaces dedicated to pedestrians (Nahnoo, 2018).

The government's IMPACT survey of municipalities (Lebanon Central Inspection & Ministry of Displaced, 2021) offers insights into public space provision across the country (Table 37). A majority of respondents (52%) reported the existence of public spaces/squares in their areas, with 11% indicating that their public spaces/squares were in a 'bad' state. Almost a third self-reported the presence of a public park, with 6% of respondents indicating that the park was in a 'bad' state. Almost a fifth of municipalities nationally reported their lighting network to be in 'bad' condition, suggesting scope for improving the safety and perception of safety of the urban landscape including public spaces through lighting maintenance.

City level

The proportion of a city's footprint made up of unbuilt land cover may offer a rough contextualization of the overall development pressure on its open spaces (Figure 22). Across the ten selected cities, the share of unbuilt space varies over a limited range, with Zahleh showing the highest share of unbuilt land (56.8%) and Saida the lowest (34.9%). It may be expected that urban policy support to preserve public spaces may be particularly pertinent in Saida and similarly dense cities (Jounieh, Beirut, Hermel). Further research to identify the trajectory of built density change would improve understanding of the relative pressures on open space between the cities.

Factoring in a population dimension, unbuilt land per person[95] as a notional indicator varies widely between the cities, from 145.6m²/person in Baalbek to only 28.6m²/person in Saida. Similar to Saida, the country's two largest cities, Tripoli and Beirut, show a low per capita figure (34.9m²/person and 36.4m²/person respectively) (Table 35). Whilst a useful metric for comparing cities, this measure does not account for whether unbuilt spaces are open to the public or what their unbuilt cover type is. Further research would be required to establish how the cities perform relative to the World Health Organization's recommendation of a minimum of 9m² of green open space per person (WHO, 2009).

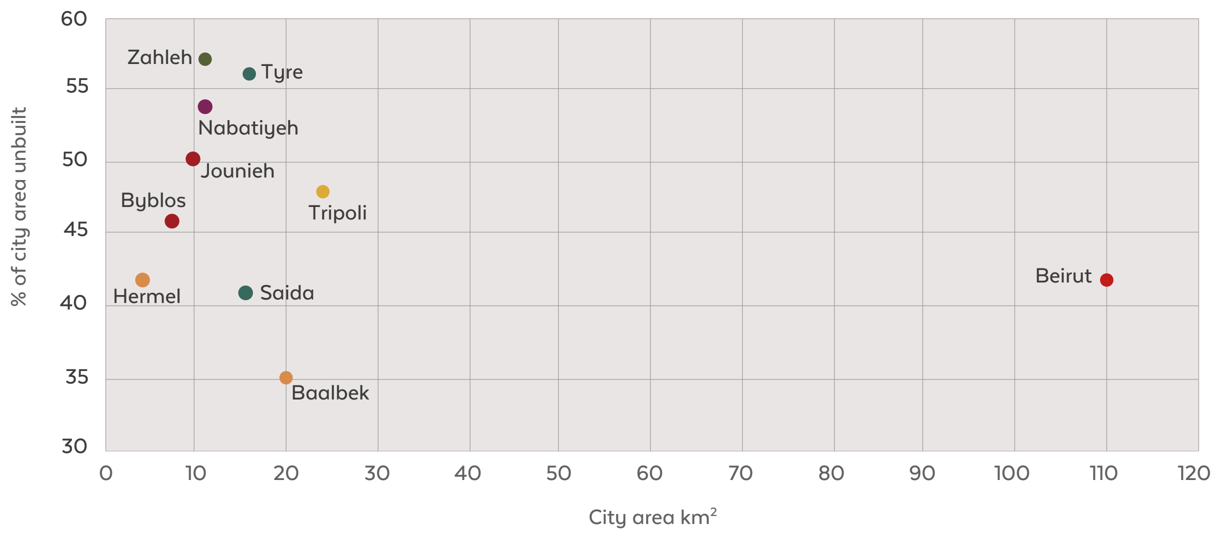


Figure 22 Unbuilt land cover as a share of total city area versus total city area 2021. *Source*: UN-Habitat (2021) based on European Commission (2018) and Google Earth (2021).

	Area within city perimeter 2021 (km²)	*Total population 2020*	*Unbuilt land cover 2018 (km²)*	*Unbuilt land cover as % of total area*	*Unbuilt land per person within city footprint (m²)*
Tripoli	24.5	335,004	11.7	47.6	34.9
Beirut	110.6	1,263,332	46.0	41.6	36.4
Jounieh	10.8	104,161	4.4	40.9	42.5
Byblos	8	30,985	3.6	45.7	117.3
Baalbek	20.5	76,199	11.1	54.1	145.3
Hermel	4.7	29,612	2.0	41.6	66.2
Zahleh	11.6	86,149	6.6	56.8	76.3
Saida	16	195,095	5.6	34.9	28.6
Tyre	16.4	124,180	9.2	55.9	73.9
Nabatiyeh	11.6	52,966	5.8	50.3	109.9

Table 35 Unbuilt land cover per person within city footprint 2021. *Source:* (in order) UN-Habitat Lebanon, 2021; Inter-Agency Coordination Lebanon, 2020; European Commission (2018) Joint Research Centre Data Catalogue: Global Human Settlement Layer (viewed 2021); UN-Habitat Lebanon, 2021.

Conceptualizing public open space as fora for social interaction brings urban streets into the equation, putting an onus on streetscape design to accommodate not only motorized transport but also pedestrian and soft mobility-mediated social interactions. This may entail selective road pedestrianization; the provision of pavements, pedestrian crossings; street shading as has been touched on in the foregoing Urban Mobility section. Elsewhere,

95 This measure relates to intra-city unbuilt land only whilst noting that people have access to unbuilt land at the urban periphery in addition.

UN-Habitat Global Urban Indicators Database (2020) shows estimates of the share of Lebanese cities that are 'open space that is for public use', the topic of SDG 11.7.1 (Table 36).[96] Open space is conceived as the sum of both public spaces and streets. Data is available for two cities only – Tripoli where 12.9% of the urban area is open public space; and Baalbek where a lesser 13.8% is open public space. The extent to which streets outweigh public spaces in terms of area is striking, reinforcing the importance of inclusive street design that safely accommodates a mix of mobility modes.

Also shown is the 'population within 400m from an open public space'; this does not include streets (Table 35). There is a large discrepancy between the cities (73% of the population in Tripoli compared to 45% for Baalbek), likely a combination of the slightly higher provision of open public space in Tripoli (1.36% of its urban area, compared to 1.02% in Baalbek) combined with its higher population density (Tripoli is by a significant margin the most densely populated of the ten selected cities).

11 SUSTAINABLE CITIES AND COMMUNITIES

SDG 11.7.1: Average share of the built-up area of cities that is open space for public use

*City**	*Share of urban area in open public spaces*	*Share of urban area in streets*	*Share of urban area in streets and open public spaces*	*Population within 400m walking distance to an open public space*
Tripoli	1.36	11.54	12.9	72.81
Baalbek	1.02	12.79	13.81	45.14

*City boundaries are defined using a different method to that used in the SoLC report and thus may vary.

Table 36 SDG 11.7.1: Average share of the built-up area of cities that is open space for public use for all. *Source:* UN-Habitat Urban Indicators Database, updated Jul 2020.[97]

Profiles of disadvantaged neighbourhoods undertaken by UN-Habitat and UNICEF (2017-2020) measured the area of each neighbourhood that comprised open space; then the share of that open space that was publicly used (Table 5). For neighbourhoods profiled in the ten selected cities (listed in Table 2).

- The proportion of neighbourhoods that are open space ranged from 2.3% (for a neighbourhood in Tripoli) to 33.8% (for a neighbourhood in Tyre).
- The share of open spaces in neighbourhoods that were also publicly accessible ranged from 4.6% (for a neighbourhood in Baalbek) to 37.4% (for a Beirut neighbourhood).

Such detailed information on the accessibility and usership of open spaces is required to measure and monitor the adequacy of public space provision in an urban area, and to design evidence-based policy to preserve and increase such spaces (Tripoli, Beirut, Baalbek, Nabatiyeh).

A breakdown by city of municipality responses to the IMPACT survey on public spaces is shown in Table 37 (Lebanon Central Inspection & Ministry of Displaced, 2021). Municipalities from all the cities reported the existence of public parks, with two indicating that their public parks were in 'bad' condition (Baalbek Tripoli). All also reported the presence of 'public spaces/squares', for which 'bad' conditions were registered across four cities.

Data indicating the existence of sites in municipalities' areas that may be suitable to convert into parks (5 in Beirut, 2 in Saida, 1 each in Tripoli and Nabatiyeh) offers a potentially actionable insight for entities seeking to augment urban public space provision (Table 37).



Photo in Beirut. ©UN-Habitat, 2019

96 The boundary setting and data gathering for this SDG indicator was undertaken separately from and in advance of the production of the current report.

97 'Indicator is computed as population with access to open public space within a walking distance of 400 meters along the street network. An open public space (...) is defined as an area that openly and freely accessible space for all (...) for enjoyment of social services such as recreation. Identification of open public spaces is based on data compiled from city land use plans and open sources including OpenStreetMap and Google Earth. Data used to estimate population with access to open public spaces is based on grid level population disaggregation directly from city/country data, or from the HRSL (Facebook and CIESIN) and WorldPop.' Source: UN-Habitat Indicators Database (2020h) [urban transport page].

City	Existence of public parks - yes	State of public parks - bad	Existence of a place prone to be rehabilitated into a public park - yes	Existence of public spaces / squares	State of public spaces / squares - bad	State of the lighting network - bad
Tripoli	3	2	1	3	1	0
Beirut	11	0	5	7	1	1
Jounieh	2	0	0	2	0	0
Byblos	1	0	0	1	0	0
Baalbek	3	1	0	3	1	0
Hermel	1	0	0	1	0	0
Zahleh	1	0	0	1	0	0
Saida	5	0	2	6	0	1
Tyre	2	0	0	2	0	0
Nabatiyeh	2	0	1	3	1	0
Lebanon	372 (38%) of 970 municipalities responding to this question	67 (11%) of 369 municipalities responding to this question	427 (70%) of 610 municipalities responding to this question	599 (41%) of 970 municipalities responding to this question	129 (22%) of 585 municipalities responding to this question	223 (25%) of 910 municipalities responding to this question

Table 37 Existence and state of public parks, public spaces and squares, potential public park sites, and lighting network state reported by municipalities. *Source:* Lebanon Central Inspection & Ministry of Displaced (2021).

City municipalities group discussion

?

Inter-municipal collaboration on public space?

City municipality survey respondents reported current collaboration on '**public space**' in three cities (Byblos, Hermel, Tyre) (Table 16).

- The availability of current and planned public spaces for the use of residents from all surrounding municipalities was noted (Byblos, Baalbek).
- One city (Tyre) noted the exercise of intermunicipal collaboration on identifying and delivering new public spaces.
- The varying capacities of municipalities within each city to provide public spaces was highlighted in discussion, whether for reasons of physical constraints or financial resourcing.
- The resource challenges to municipalities of stewarding public spaces, which has been reported as a barrier to maintaining public access to existing spaces (such as in the case of Beirut city's major green space Horsh Beirut (Mady, 2018)), was not raised.

Ways forward

- Unbuilt space presents a significant share of the selected cities, from 35% of 56% of the urban area in the cities analyzed. Usership patterns and land cover stand to be inventoried in order to assess actual public access to open space (as has been undertaken for profiled neighbourhoods in the cities presented above) and to measure cities' public space provision against, for instance, the WHO standard of 9m^2 of green open space per person. Such benchmarking would be required to inform the city-level strategic approach to public space preservation and expansion. UN-Habitat (2021) offers the 'City-wide public space assessment toolkit: A guide to community-led digital inventory and assessment of public spaces' for consideration in this regard.
- Lebanon presents a context of ongoing public space attrition. Addressing this is likely to require high level policy commitment against which to anchor local efforts. UN-Habitat's Global Public Space Toolkit (2015:41) recommends representing country visions for public space in national urban policy and local government planning policy. There is scope for articulating such a vision as an integral element of Lebanon's national spatial development framework.
- Public space should be part of citywide strategic plans. A city-level lens onto streets and other public spaces would facilitate the design of green, blue[98] and/or open space networks linking publicly accessible spaces across the urban landscape. To support safety and security in public spaces, insights may be drawn from safety, accessibility and protection initiatives including 'UN Hercity' which offers insights into designing safe urban spaces and 'UNICEF Child Friendly Cities Initiatives' particularly in regard to its 'built environment' component.

98 Blues spaces are outdoor locations that benefit from proximity to natural or artificial water features, such as riverside trails, seafronts and urban fountains. They may form part of a blue-green infrastructure.

- The quality of open spaces is a parameter at least as important as its quantity. This section has shown that urban public spaces in city municipalities across the ten selected cities are often in 'bad' condition, in some cases suffering from poor street lighting presenting safety risks.
- Streets as well as traditional public parks should be recognized as public space, channeling attention to the need to design urban streetscapes in ways that serve the needs of multiple transport and mobility modes including pedestrian and other soft mobility means. This imperative should be coordinated with transport and mobility policy, described in the previous report section.
- Options for increasing the share of open space in dense urban neighbourhoods where it is most needed include state-led or civil society-led initiatives to convert post-demolition sites to public space use – or to advocate for selective demolition to the same end. Similarly, planning regulations in Lebanon could stand to require - in instances to be defined - the provision of open space, amongst other public interest investments, in return for the granting of planning permission. UN-Habitat (2015) advocates for land acquisition for public space from developers in return for land value rise from development. Such an approach would benefit from pre-agreed open space standards set with complementarity across a range of nested geographical scales as transparent targets. This report has identified municipalities which contain self-reported spaces amenable to development as public spaces which may offer entry points for augmenting public space supply as part of city-wide strategies.
- In the scenario of planning urban extensions as described in the Governance section of the current report, public spaces and streets need to be allocated. The UN-Habitat Global Public Space Toolkit recommends allocating around 25-30% of land to streets and 15-20% to other public open spaces (UN-Habitat, 2015:32).
- Acknowledging the acute scarcity of public resources, attention is required to identifying innovative approaches to the guarding and stewardship of public spaces, possibly drawing on CSOs and/or individuals local to the neighbourhood in question. Resources for guarding public spaces has presented a barrier to maintaining access in Lebanon.

Health

The field of public health has within its remit the relationship between health and the environment. UN-Habitat and WHO (2020) has produced guidance on integrating health into urban planning and governance, noting the common historic origin of planning and public health in sanitation and air quality initiatives. The guidance indicates that improvements in health, wellbeing and health equity are integral to making progress on SDGs and the New Urban Agenda (UN-Habitat, 2017a), both as inputs to urban planning decision-making and as outputs or impacts.

Urban features impacting negatively on public health and which are amenable to holistic urban planning include

- Unhealthy living or working environments that are poorly planned and managed, exposing people to air, water and soil pollution and chemicals, and to waterborne illnesses. Air pollution has been correlated with increased COVID-19 mortality rates (UN-Habitat and WHO, 2020: Box 1.1)
- Low density sprawling urban environments which prioritize car-based transport over mixed modal splits that include walking, and limited access to public space for physical exercise, both fostering physical inactivity;
- Inadequate housing conditions, including lack of indoor access to water and sanitation; overcrowding, building envelope deficits allowing water incursion and thermal extremes;
- Limited access to healthy including fresh food at home and at work ('food deserts'), where urban planning does not support local food businesses, urban agriculture and their transport needs;
- Environmental noise pollution;
- Exposure to temperature and climate event extremes in the absence of climate change adaptive measures;
- Wealth inequity, with poverty generally correlating with poorer health outcomes.

Source: Adapted from UN-Habitat and WHO, 2020:14

Since 2019, the COVID-19 pandemic has pulled into focus cities as both interaction-dense entry points of contagion as well as key front lines for responses capable of reach high numbers of people rapidly. The pandemic has also highlighted the importance of good governance to responding effectively, including through e-government channels. Like other shocks, the impacts of COVID-19 have most affected cities' most vulnerable communities and households who are least resilient in the face of health and economic challenges, with wide differences in health outcomes at the intra-urban level. The urban dimension of COVID-19 pandemic has been detailed extensively elsewhere (UN-Habitat, 2021k). The urgency of addressing background air pollution; the increased pressure on public space for recreation; and the increased need for adequate water and sanitation are clear.

Generally, sustainable urban development must incorporate a public health lens. Urban planning that supports public health entails as a minimum identifying and addressing pre-existing social inequalities and

resolving public service deficits as well as cross-cutting governance capacity gaps to build resilience.

National

Lebanon's health service and state infrastructure have been burdened by decades of civil war and weak governance. Vulnerable populations are most affected by gaps in public service provision, lacking basic means of social protection and having scarcer resources for mitigating those gaps. Since 2019, recent crises including the COVDI-19 pandemic, the collapsing economy and the Beirut Port explosion of 2020 have further stressed the sector (UN-Habitat, 2021a).

The influx of Syrian refugees to Lebanon since 2011 with its increase in healthcare demands has exposed the gaps in the existing public health system and over-stretched the capacities of national and local authorities (Tyler, 2014). Prior to the recent various challenges, the Lebanese health sector had been broadly able to accommodate the Syrian increase in population. However, this population displacement added a financial strain on public institutions that in turn jeopardizes the sustainability of the sector (MoPH, 2016a:36). In a context of weakened public capacity, healthcare has become pluralistic and fragmented, involving both the public and private sectors in the financing and provision of services. The private sector leads in service delivery: 80% of hospitals are private and 67% of Primary Healthcare Centers (PHCCs) are owned by NGOs. A multitude of private stakeholders including religious and political organizations, private institutions, civil society and NGOs dominates outpatient care (El-Jardali et al, 2017). The private health sector is oriented towards hospital-based curative care, which overtakes 48% of the total public health expenditure (Tyler, 2014) and provides 85% of health services, prior to the recent compounding crises (UNCT Lebanon, 2020).

Challenges in the health sector include addressing non-communicable diseases, public health promotion and strengthening preventive healthcare by establishing preparedness and surveillance systems. In response, the MoPH adopted a National Health Strategic Plan (2016-2020) that aims to enhance and strengthen Lebanese healthcare systems through modernizing and strengthening administrations and improving governance, leadership and accountability; improving collective public health and promoting health throughout the life cycle; working towards universal health coverage; and maintaining emergency preparedness (MoPH, 2016b).

The LCRP 2017-2021 (GoL and UN, 2021) through its health sector partners also targets vulnerable and marginalized populations (mainly displaced Syrians, vulnerable host Lebanese, PRS and PRL and non-Syrian refugees) to support access to safe, affordable and inclusive health services. The key response strategy focuses on strengthening coordinated interventions to foster '(a) strong comprehensive and complementary primary, secondary, and tertiary physical and mental health care system; effective outbreak and infectious diseases control; and increased access to adolescent and youth health programmes' (GoL and UN, 2021).

Impact of compounding crises

Lebanon's multiple compounding crises have had severe repercussions on access to healthcare services.

Economic Crisis

The ongoing economic crisis has decreased the purchasing power of residents and rendered private healthcare unattainable, leaving residents dependent on an already overstretched public health system (MSF, 2021a). According to a UNICEF survey, 30% of children were not receiving the needed primary healthcare services and 76% of households reported that they were affected by the great increase in medication prices. Primary healthcare consultation and immunization witnessed drops of 15% and 20% respectively in 2020 compared to 2019 (UNICEF, 2021).

Human Rights Watch is warning that hospitals will soon not have the basic capacity to provide patients with life-saving surgery and urgent medical care (HRW, 2019b). Access to medicine will narrow with the ongoing phased lifting of subsidies on essential medicines by the indebted government (Dahan, 2021). For patients with non-communicable diseases, 29% had already interrupted or rationed their medication before the Beirut Port explosion of 2020, of which almost half reported financial difficulties as the main reason; while 11 per cent said it was due to the medication going out of stock (MSF, 2021b). Chronic diseases patients who need daily medications are facing a huge shortage that is exacerbating badly and having to substitute their prescribed pills with alternatives, if the latter is available (Dahan, 2021). There has been a mass outmigration of medical professionals (France 24:2021). In the context of its multidimensional poverty index assessment, ESCWA has noted that 'The share of families who are unable to obtain medicines has increased to more than half (52%)' (ESCWA, 2021c). Further, private health insurance is out of reach for growing numbers, leading to heightened pressure on the public sector. Over half the population (55%) is not covered by any form of health insurance (Ibid).

Beirut Port explosions

The Beirut Port explosions (August 2020) resulted in fatalities, injuries and damage to services and infrastructure that affected not only Beirut and Mount Lebanon, but had detrimental effects nationally (MSF, 2021b). Within both the public and private sectors, 292 out of 813 health facilities located in the 6km radius of the blast were affected, reducing access to healthcare. With the heightened demand for health services after the blast and in the COVID-19 pandemic, the sector saw a severe depletion of supplies, PPEs and medications, (Ibid) while the central warehouse of MoPH storing all national supplies sustained serious damages (MSF, 2021b). A further 500 hospital beds were lost, accounting for around 10% of the beds in the Beirut and Mount Lebanon governorates, stressing the already

at-capacity hospital sector during the COVID-19 pandemic (UN-Habitat, 2021a). The explosions affected not only the immediate blast area but also PHCCs over the country due to knock-on pressure from Beirut.

COVID-19

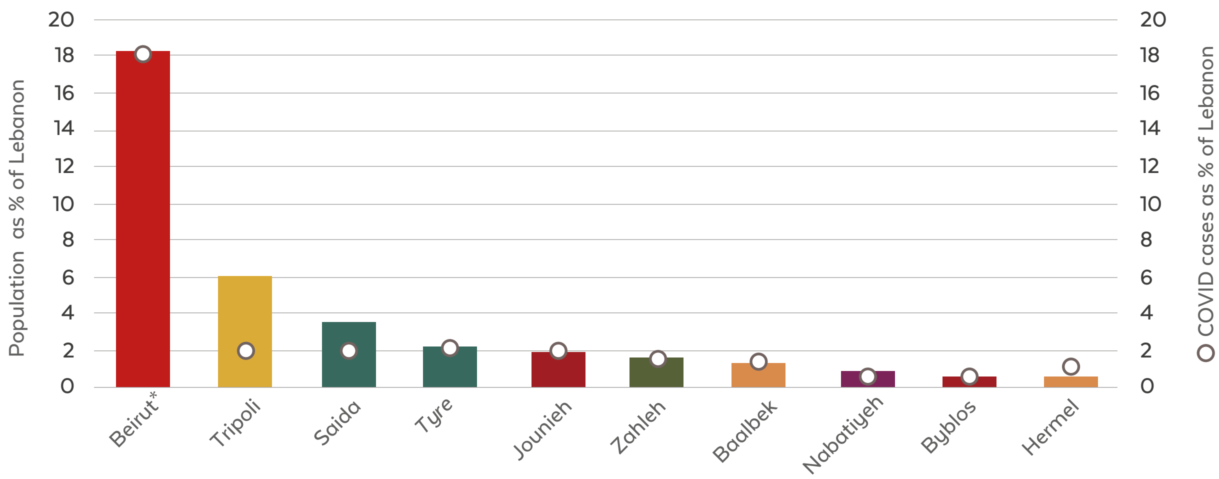
The COVID-19 pandemic that hit the country from early 2020 further stressed a healthcare system already facing major shortages due to the financial crisis. The health system and frontline workers struggled to cope with the drastic growth of cases, that were operating beyond capacity, in addition to a shortage of oxygen and ventilators (Project HOPE, 2021). Access to healthcare decreased in 2020 due to the COVID-19 outbreak public health measures including lockdowns and decreased working hours, but also due to fear of exposure.

City level

As reported by MoPH on 24 July 2021, the districts of Nabatieh and Zahleh recorded the highest cumulative COVID-19 incidence rate at around 15,000 and 13,000 per 100,000 population respectively, while Hermel and Tripoli recorded the lowest incident rates. Beirut witnessed the highest number of cumulative cases, accounting for around 49,000 cases since the start of the pandemic (Table 38).

City	*District*	*Cumulative Cases*	*Cumulative Incidence Rate /100,000*	*Cumulative Mortality Rate /100,000*
Tripoli	Tripoli	20,821	6,123.69	167.06
	Miniyeh-Danniyeh,	7,005	3,263.11	81.99
	Zgharta	9,347	12,219.29	183.02
Beirut	Beirut	48,820	10,042.74	155.72
	Baabda	78,733	11,964.54	172.93
	Aley	31,549	17,942.56	206.45
	Metn	60,785	9,563.39	134.05
Jounieh	Keserwan	25,172	11,704.74	186.46
Byblos	Byblos	12,478	11,378.31	131.31
Baalbek	Baalbek	28,652	10,050.35	189.07
Hermel	Hermel	3,407	5,226.46	159.40
Zahleh	Zahle	27,770	12,647.07	270.98
Saida	Saida	28,323	8,684.51	122.34
Tyre	Tyre	29,307	8,523.81	96.56
Nabatiyeh	Nabatieh	21,091	14,914.45	124.46

Table 38 COVID cases by district. *Source:* Ministry of Public Health website, 24 July 2021.



*Beirut Municipality not included in the Beirut City count due to data unavailability.

Figure 23 Percentage of COVID-19 cases out of the total number of cases on a national level, as reported by the Ministry of Public Health and reviewed by the local authority, as at Sep 2020, totaled from municipalities making up the ten cities. *Source:* Lebanon Central Inspection & Ministry of Displaced, 2021.

Figure 23 shows that at the time of data collection (Sep 2020), the share of COVID-19 cases for most of the 10 selected cities was remarkably aligned with each city's population size, suggesting a broadly proportional incidence rate relative to population size across the cities. Exceptions are Tripoli and Saida, where the share of cases was disproportionately low compared to their population size (Tripoli has 6% of the national population but only 2% of all COVID-19 cases at time of data collection) and Hermel (which appeared to experience a disproportionally high number of cases relative to its population). Further specialized analysis would be needed to establish whether such a pattern is supported by other methods of quantifying COVID-19 cases and over other timeframes. Notably, Beirut Municipality, the most populous municipality in Lebanon, is not included in this data source. Whilst the ten cities (discounting Beirut Municipality but including the rest of the wider city) contain 36.9% of the national population, the share of COVID-19 cases they accounted for was lower than proportional, at 30.1%.

Population health status

According to CAS and ILO (2019), 24.1% of residents in Lebanon had a chronic health condition in need of regular monitoring and financing for medications and medical services. Of those, 19.2% had medical needs for medications and/or services that were not met. The vast majority reported that the main reason was that they could not afford it. During the three months prior to the survey, 16.9% of the surveyed population were sick or injured, out of which 8.7% did not receive any medical help.

Data from urban neighbourhoods profiled in the ten selected cities show spatial variations in the general health status of its disadvantaged populations (Table 39). The share of chronically ill residents reaches as high as 20.1% (Lebanese cohort in Maraash, Beirut). There is no clear pattern of chronic illness incidence between Lebanese and Non-Lebanese cohorts.



Photo in Beirut. ©UN-Habitat, 2019

Neighbourhood	*Chronically ill Lebanese (%)*	*Chronically ill non-Lebanese (%)*
Tripoli City		
El-Qobbeh	14.6%	16.7%
Tabbaneh	15.1%	13.0%
Jabal Mohsen	11.8%	13.4%
Haddadine	11.1%	8.1%
Beirut City		
Daouk-Ghawash	11.6%	7.6%
Hayy Tamlis	2.1%	7.1%
Sabra	16.5%	9.0%
Karm El-Zeytoun	13.5%	1.6%
Maraash	20.1%	12.6%
Hayy El-Jadid	18.8%	8.9%
Nabaa	12.9%	13.7%
Baalbek City		
Shooab	14.6%	18.7%
Mogher El-Taheen	14.2%	8.5%
El-Soleh Sahet El-Naser	20.0%	19.3%
Zahleh City		
Haoush El-Oumara	8.2%	6.5%
Jounieh City		
Hayy El-Kharoubeh	No data	No data
Saida City		
Old Saida	13.0%	13.7%
Tyre City		
Maachouk	8.3%	9.8%

Table 39 Chronically ill Lebanese and non-Lebanese across profiled neighbourhoods in selected cities. *Source:* UN-Habitat and UNICEF, 2017-2020.

Non-communicable diseases in Lebanon

Cardiovascular diseases and strokes are the leading causes of death in Lebanon. Non-Communicable Diseases (NCDs) reach 85% of burdens of diseases (El-Jardali et al, 2017). In response, MoPH with WHO launched an NCD pilot programme in 2012 that aims to raise awareness concerning health issues, early detect and prevent diabetes, hypertension, and dyslipidemia through screening patients of designated PHCCs and monitoring of the patients with cardiovascular diseases (Ibid).

Access to healthcare

PHCCs play a central role in delivering public healthcare. Through a collaboration between MoPH and other stakeholders (Figure 23), 67% of PHCCs in Lebanon are operated by NGOs, 20% by municipalities and 13% by governmental bodies (MoPH or MoSA). To provide equitable access to services, especially among the most vulnerable, the number of PHCCs has increased - mainly through international funding; however, their long-term sustainability remains in jeopardy due to the protracted nature of the current crises (El-Jardali et al, 2017).

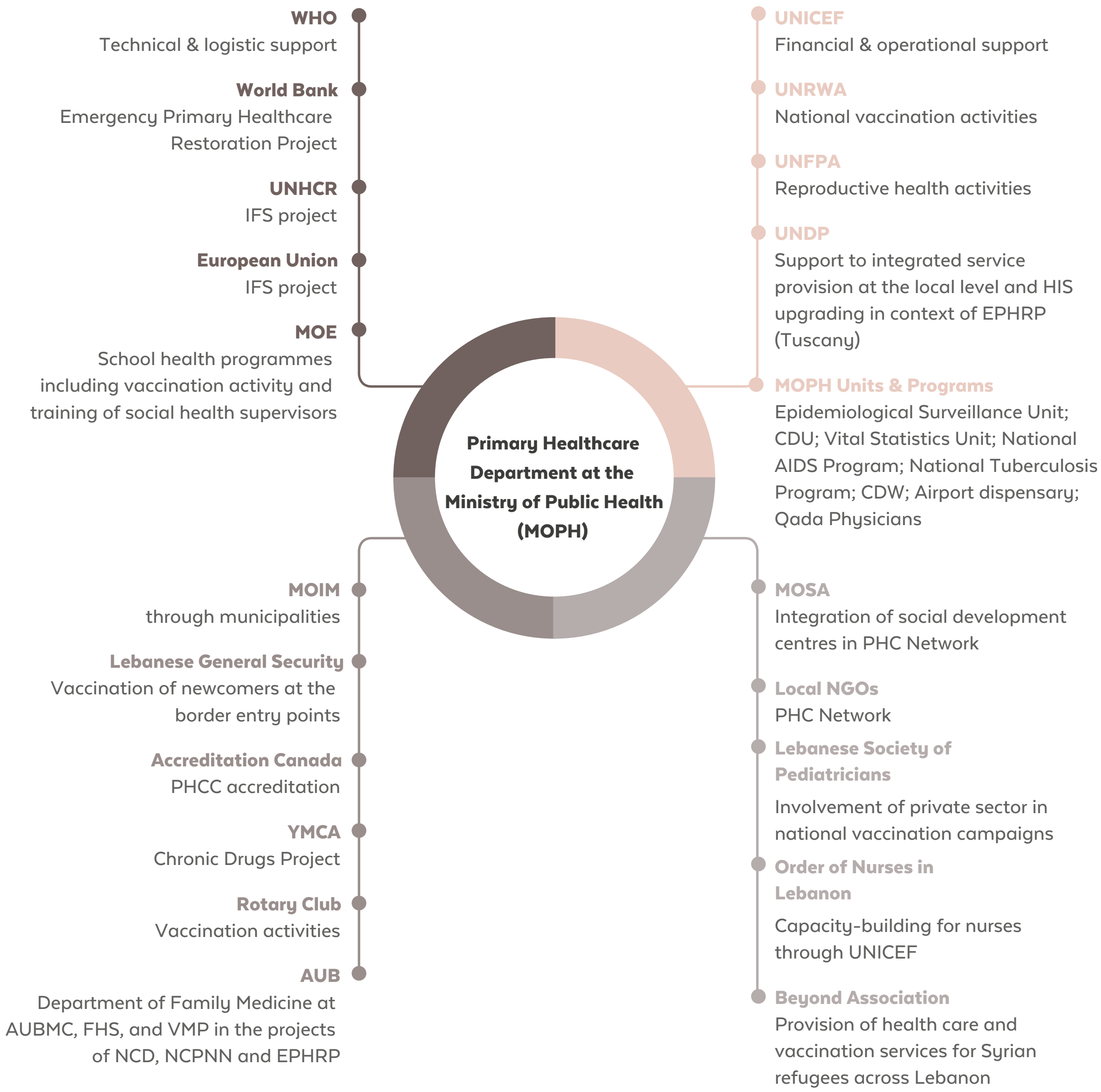


Figure 24 Actors contributing to the success of Primary Health Care Centres in Lebanon. *Source*: El-Jardali, F et al, 2017:17.

UNRWA provides free access to primary health care for Palestinian refugees, fielding around 930,000 consultations yearly. UNRWA also secures access to secondary health care through a collaboration with the Palestine Red Crescent Society hospitals and developed a reimbursement scheme for received secondary and tertiary care in Lebanese healthcare centres and hospitals (Malmö University, 2017).

Households of foreign nationalities reported not having access to healthcare in 40% of cases compared to 36% for Lebanese households. The majority of both Lebanese and non-Lebanese households cited financial difficulties as the main reason (IOM, 2020).


Photo in Tripoli. ©UN-Habitat, 2017

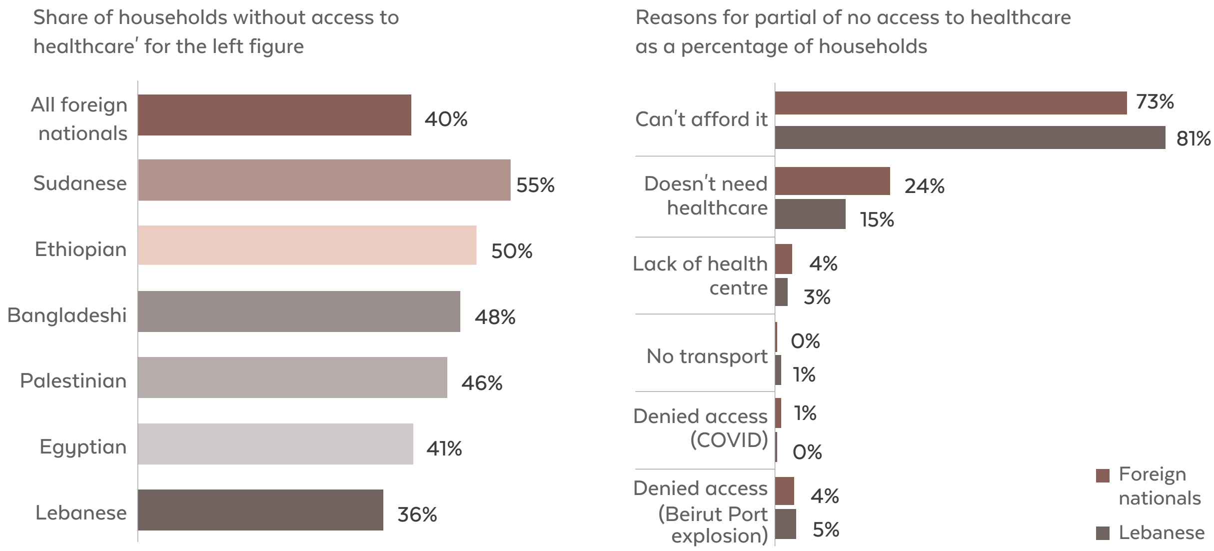


Figure 25 Household access to healthcare in Lebanon. *Source*: IOM, 2020.

The national distribution of PHCCs broadly reflects that of the population in terms of concentration of facilities in Beirut, Tripoli and Saida cities. All ten cities have both PHCCs and at least one secondary healthcare facility (hospital) (Table 40). It is not within the scope of the current report to analyze the extent to which these facilities meet local and regional needs. It may be noted that recent research has shown an urban-rural bifurcation in PHCC the human resources present in PHCCs, with fewer PHCCs fulfilling their staffing requirements in rural areas than in urban (Hemadeh et al., 2020). There is likely scope for a spatial approach to rationalizing supply-demand imbalances across the territory, with scope to articulate the built implications - such as the siting of hospitals and other health facilities - through a national spatial framework to ensure its servicing and other spatial needs are met.

At district level, Baalbek and Saida are the districts with the highest number of PHCCs: 15 and 14 respectively (Table 40). However, when analyzed by number of subsidized admissions per district, Tripoli (11,048 admission) and Beirut (5,266 admission) received the highest number of subsidized admissions in public hospitals while Zahleh (13,084 admission) and Tripoli (9,983) scored the highest in private hospitals in the year 2019.

City	*PHCCs*	*SHCCs*
Tripoli	47	11
Beirut	147	28
Jounieh	10	1
Byblos	4	3
Baalbek	6	3
Hermel	5	1
Zahleh	7	4
Saida	37	12
Tyre	12	3
Nabatiyeh	11	5

Table 40 Primary health care centres and secondary health care centres within the city boundaries. *Source:* UN-Habitat & UNICEF Neighbourhood Profiles Geoportal, viewed Jul 2021.

The category of diagnosis of subsidized hospital admissions were mostly circulatory system diseases; symptoms, signs and abnormal clinical findings, respiratory system diseases, among others.[99]



Photo in Beirut. ©UN-Habitat, 2019

99 This data was gathered as part of the 'Labour Force and Household Living Conditions Survey 2018-2019' by CAS and ILO (2019).

According to data from profiles of selected disadvantaged neighbourhoods (Table 41), residents in profiled neighbourhoods in Baalbek City had the most awareness of subsidized health services, while those of Zahleh City were least aware. Average awareness ranged between around 50% to 60%. As for willingness to use and satisfaction with health services, the results show great variation between profiled neighbourhoods, ranging from 40.5% to 86.1% for the former and from 52.0% and 94.0% for the latter.

Neighbourhood	*Awareness of subsidized health services*	*Willingness to use health services*	*Satisfaction with health services*
Tripoli City			
El-Qobbeh	56.5%	40.5%	52.0%
Tabbaneh	55.6%	58.8%	60.8%
Jabal Mohsen	55.7%	52.7%	52.7%
Haddadine	59.8%	59.7%	64.0%
Beirut City			
Daouk-Ghawash	56.3%	81.1%	74.6%
Hayy Tamlis	54.1%	41.7%	72.3%
Sabra	52.7%	63.3%	74.6%
Karm El-Zeytoun	56.1%	86.1%	94.0%
Maraash	59.5%	62.4%	61.8%
Hayy El-Jadid	69.8%	60.7%	87.0%
Nabaa	58.1%	62.3%	58.5%
Jounieh City			
Hayy El-Kharoubeh	No data	No data	No data
Baalbek City			
Shooab	49.5%	56.6%	88.4%
Mogher El-Taheen	80.2%	86.1%	75.1%
El-Soleh Sahet El-Naser	61.5%	54.3%	89.6%
Zahleh City			
Haoush El-Oumara	42.9%	76.1%	70.1%
Saida City			
Old Saida	49.1%	68.3%	73.7%
Tyre City			
Maachouk	53.6%	70.7%	82.1%

Table 41 Awareness of, willingness to use and satisfaction with subsidized healthcare services across profiled neighbourhoods in the ten cities. *Source:* UN-Habitat and UNICEF, 2017-2020.

Insurance coverage

3 GOOD HEALTH AND WELL-BEING

Target 3.8 Health coverage

Indicator 03:08:01 Universal health coverage (UHC) service coverage index

73 (2017) **49** (2000)

Source: Lebanon SDG Monitor (ESCWA, 2021b)

Only 55.6% of Lebanon's residents are covered by any type of health insurance including National Social Security Fund, governmental schemes or private insurance (Figure 26); conversely, 44% are not covered by any health scheme (CAS & ILO, 2019). The uninsured population is covered by MoPH for hospital care through contracted accredited private and public hospitals. Also, the governmental body provides primary healthcare, free chronic medication, affordable consultations and vaccines in PHCCs to all residents across Lebanon (El-Jardali et al, 2017). Among those with health insurance, the National Social Security Fund is the main entity, covering 45.5% of beneficiaries (Figure 26).



Photo in Beirut. ©UN-Habitat, 2021

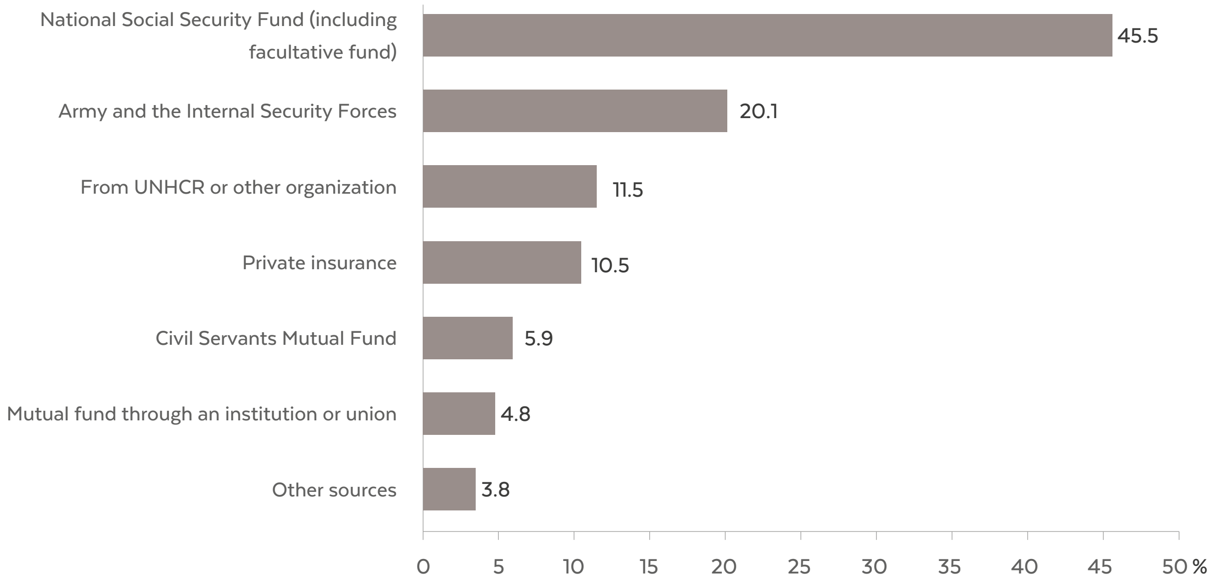


Figure 26 Health insurance source (%) among those with insurance in Lebanon. *Source*: CAS & ILO, 2019

At district level, Hermel had the lowest coverage within the studied cadasters with only 38.9% of its residents covered, followed by Tripoli with a 40.1% coverage. Keserwan and Jbeil recorded the highest in terms of coverage with 77.8 and 71.9%, respectively (Figure 27).

Large disparities were found between health insurance coverage among Lebanese households and non-Lebanese households, as shown in the data segregated by profiled neighbourhoods. The highest coverage is in Karm El-Zeytoun in Beirut City for both cohorts, but still show great differences, where coverage among Lebanese households was at 92.1% while that of non-Lebanese was only 29.6%. Differences in between neighbourhoods within the same city is also observed, where also in Beirut City in Daouk-Ghawash, the health insurance coverage among non-Lebanese households reaches a shocking 0.7%, the lowest among all studied neighbourhoods (Table 42).

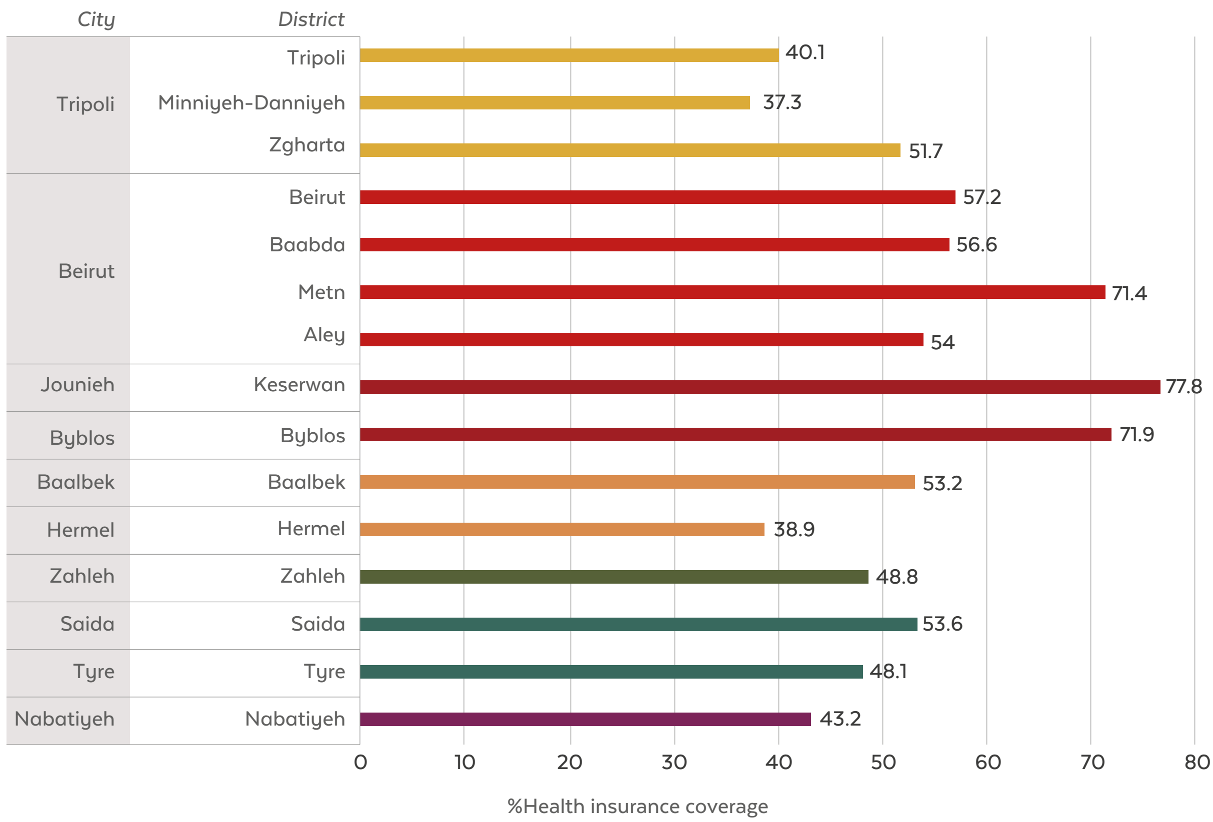


Figure 27 Health insurance coverage of the population living in the districts containing all or part of the ten selected cities. *Source*: CAS and ILO, 2019.

Neighbourhood	*Health insurance coverage*	
	Among Lebanese household members	*Among non-Lebanese household members*
Tripoli City		
El-Qobbeh	15.7%	9.1%
Tabbaneh	18.0%	8.8%
Jabal Mohsen	27.5%	8.2%
Haddadine	16.8%	3.9%
Beirut City		
Daouk-Ghawash	20.4%	0.7%
Hayy Tamlis	89.4%	3.9%
Sabra	31.8%	2.6%
Karm El-Zeytoun	92.1%	29.6%
Maraash	28.1%	1.6%
Hayy El-Jadid	64.6%	9.0%
Nabaa	19.3%	6.4%
Jounieh City		
Hayy El-Kharoubeh	No data	No data
Baalbek City		
Shooab	35.6%	15.2%
Mogher El-Taheen	20.4%	0.9%
El-Soleh Sahet El-Naser	25.9%	8.8%
Zahleh City		
Haoush El-Oumara	40.7%	3.3%
Saida City		
Old Saida	27.5%	5.2%
Tyre City		
Maachouk	27.4%	25.4%

Table 42 Health insurance coverage among Lebanese and non-Lebanese households across profiled neighbourhoods in the ten cities. *Source:* UN-Habitat and UNICEF, 2017-2020.

City municipalities undertaking recent health sector projects

The IMPACT survey of municipalities (Lebanon Central Inspection and MoD, 2021) found that of 1,003 municipal respondents to the question on whether there existed 'initiatives and projects in the past five years to improve the health sector', 108 municipalities (11%) replied positively, with the remaining answering in the negative or not answering (Table 43).

Among the municipalities of the ten selected cities, 46 of the overall 69 municipalities gave responses. Nine of these reported having undertaken health sector-related initiatives or projects, constituting a mere 8%. These projects were focused on Beirut City.

Existence of initiatives and projects in the past five years to improve the health sector		
City	*No. of municipalities*	*Municipality names*
Tripoli	0	-
Beirut	4	Ouadi Chahrour El-Soufla, Antelias – Naqqach, Ghobeire, Chiyah
Jounieh	1	Zouq Mkayel
Byblos	0	-
Baalbek	1	Aain Bourday
Hermel	1	Hermel
Zahleh	1	Zahleh Maalaqa
Saida	1	Haret Saida
Tyre	0	-
Nabatiyeh	0	-

Table 43 Existence of initiatives and projects in the past five years to improve the health sector among municipalities of the selected cities. *Source:* Lebanon Central Inspection & Ministry of Displaced (2021).

City municipalities group discussion

Inter-municipal collaboration on health?

City municipality survey respondents reported current collaboration on 'health' in three cities (Byblos, Hermel, Tyre) (Table 16).

- Four cities (Beirut, Byblos and Tyre) reported ongoing intermunicipal collaboration on health matters, with two more (Jounieh, Nabaiyeh) indicating limited or weak collaboration.
- The sector was considered an urgent priority for intermunicipal collaboration by Tripoli City.
- Tripoli, Byblos and Tyre all highlighted the strong coordination driven by COVID-19 response in terms of hospitalization and critical care, with Baalbek recognizing the retrospective need for same.
- Baalbek noted the need for similar intermunicipal coordination on the COVID-19 vaccination programme.

Ways forward

Whilst pure public health sector responses to the current compound crises in Lebanon are emerging elsewhere, including in regard to COVID-10 (eg see GoL and UN, 2021; ESCWA, 2021b; OCHA, 2021:28), the following points focus on the interface with urban management and planning.

- The link between public health on one hand and urban basic services and infrastructure on the other means that health benefits stand to be gained indirectly from improved urban management in Lebanon in regard to issues including residential building quality standards, access to water and sanitation; transport modal shift towards low-emission and active mobility modes, solid waste management that avoids open burning; access to safe public spaces; regulation of street level hazards including hazardous power cabling. Urban planning activities should mainstream improved public health as an explicit objective.
- Efforts to reduce inequality in socioeconomic status and in access to public services at the intra-city level in order to leave no one behind require closer understanding of spatial variations in household wealth and living conditions. The UN-Habitat and UNICEF approach to identifying most disadvantaged areas nationally and profiling selected neighbourhoods may be scaled up to this end, possibly as part of the data gathering that prefaces city-level strategic urban planning.
- Public health parameters at both the demand side in terms of population health status and vulnerabilities as well as at the supply side, in regard to direct health facility provision are critical factors to reconcile spatially at inter-city and intra-city scales to support more sustainable urban development.
- Relevant public health entities should be actively engaged as stakeholders in spatial planning endeavours at national and city scale to ensure the coordination of their spatial needs with those of other public policy areas.
- The interaction between public health, both physical and mental, and physical and socio-economic urban systems should be actively recognized in city municipalities' consideration of their mandates.



Photo of Nabatiyeh. © Mohamd Salim Bitar, 2019



Photo in Beirut. ©UN-Habitat, 2011

Education

The Universal Declaration of Human Rights (article 26) asserts the basic right to education, which is echoed in SDG 4 'Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all'. Sustainable urbanization promoted in the 2016 New Urban Agenda (UN-Habitat, 2017) involves expanding access to education amongst other services as part of reducing inequalities. Linking SDG 4 to the 'urban' SDG 11,[100] UNESCO highlights that 'Education can give people the skills to participate in shaping and maintaining more sustainable cities, and to achieve resilience in disaster situations' (UNESCO, 2016:18). UNICEF's 'Child Friendly Cities Initiative', aimed at helping local governments advocate for children as a vulnerable group in an urbanizing world, highlights the provision of quality education as one of several youth-specific outcomes that local authorities should support (UNICEF, 2018).

How education helps create more inclusive and sustainable cities:

- Providing equal education for all can even out inequalities inside urban areas
- Education improves employment prospects for all, reducing numbers in informal work
- Effectively trained and supported teachers can challenge stereotypes and discrimination in schools
- Educating people can also help them know their rights to access basic services, which can encourage inclusion
- Educating people on environmentally friendly activities can make cities more sustainable.

(Benavot, 2017)

Educational outcomes are a major variable in the ability of households and individuals to move out of poverty. Education improves employment prospects and raises the likelihood of inclusive economies. Skilled workers are crucial for economic growth and innovation, including in terms of building and maintaining cities' knowledge economies. Educating people can help them know what their rights are to basic services, presenting a momentum for inclusion (Benavot, 2017).[101] Insofar as cities - relative to rural areas - are characterized by increased tolerance and opportunities for cultural exchanges, urban education institutions can harness that marker to foster social cohesion (UNESCO, 2016:28).

> 'For the sustained economic value of urbanization to be realized, human capital development is crucial. Cities must offer equal opportunities for all residents to access appropriate education and further develop their skills for productive participation in society.'
>
> *(UN-Habitat, 2020:84)*

Sustainable urbanization thus implies expanding access to education, through both addressing existing deficits and planning for future demand. Spatial planning for urban population growth should integrate education system facilities informed by demographically disaggregated population projections, as for other public services. Urban educational facilities are inherently connected with housing,[102] transport,[103] environmental and employment policy.

Against an international backdrop of unequal access to education among city residents (Benavot (2017) particularly cites slum-dwellers, refugees and rural migrants), COVID-19 measures have exacerbated disparities where reliance on online learning has presented challenges to those from households without internet access and/or with lower levels of literacy and IT literacy among household carers.

National

Governance of schools

The education system in Lebanon is centralized, with elementary, secondary and higher education overseen by the Ministry of Education and Higher Education (MEHE). It has both public and private schools at all levels, though only one public university. Through its regional education offices, MEHE regulates the regions' subnational educational systems and stakeholders (CoR, 2020).

The Center for Educational Research and Development (CERD), an independent public statistical and research institution directly linked to MEHE, responds to the sector's developmental and technical needs through

100 SDG 11 Sustainable cities and communities

101 Benavot notes that certain urban organizations (eg Slum/Shack Dwellers International) have seized the education agenda and are leveraging it to help urban slum residents articulate their needs to city leaders (Benavot, 2017).

102 For instance, internationally, urban planning has been implicated in creating more socially integrated schools by remediating residential segregation in school catchments including through supporting affordable housing in higher-income areas.

103 For instance, with their associated need for mass, low-cost, safe transport for students and staff, schools can be anchors for catalyzing city-level shifts to soft mobility including cycling; this in turn is dependent on creation of conducive urban environments through urban planning and design.

developing and implementing pre-university curricula, conducting teacher training and leading educational data-gathering and research efforts

Distribution of students across public and private sector institutions

At school level, public schools account for a minority 32% of students; private schools a majority of 52.2% and a further 12.5% in free private schools. UNRWA runs a separate system for Palestine refugees, with its schools accounting for 3.3% of students (CRDP, 2020).

At all levels spanning the pre-university and university ages of 3 to 24 years old, CAS and ILO (2019) reported that 46.5% of students were in public institutions; 47.8% in private institutions and 5.6% in free private Lebanese institutions (Figure 28). Lebanese students were more likely to be attending private institutions (59.3%) compared to non-Lebanese students, among whom the majority (76.3%) attend public institutions.

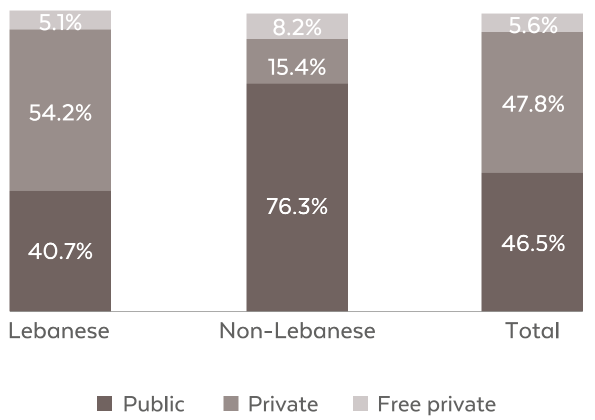


Figure 28 Currently enrolled 3 to 24 year old students by type of educational institution and nationality. *Source*: CAS and ILO, 2019.

Status of education

The Lebanon Reform, Recovery and Reconstruction Framework (World Bank et al, 2020:53) reported that:

- Learning quality in the education sector has declined over the last decade, with over half of students now not achieving basic proficiency in reading, maths and science.
- The education system has high inequalities:
    - Boys and girls from poor households are at high risk of dropping out or not attending at all;
    - Approaching 50% of Syrian refugee children between 6 and 17 years are out of school.

Higher education is neither regulated for quality standards nor tailored to meet the demands of the labour market resulting in a mismatch of skills yielding significant unemployment rates. This mismatch has been quantified in terms of the 32% of employed youth who are overeducated compared to the educational requirements of their current jobs (World Bank, 2021a). The declining quality of education is indicated through the results of an international survey (Programme for International Student Assessment) which found that two-thirds of students enrolled in the Lebanese system do not achieve literacy, a rate alarmingly low according to international standards (World Bank, 2021a).

Based on data collected in 2018, district-level enrolment rates among residents aged 3 to 24 reached 71.1%, a figure comprising a slightly higher rate among females (74.4%) than males (69.1%) (CAS and ILO, 2019). The figure also disaggregates along nationality lines to show a large discrepancy between Lebanese (79.2%) and non-Lebanese (48.2%). However, enrolment rates have seen a decrease since 2004. Among the age group of 5 to 9 years old, rates dropped from 98.6% in 2004 to 92.7% in 2019. A similar drop was observed among the age group of 10 to 14 years old from 95.2% to 92.4%. More recently, the out-of-school rate for both primary and secondary levels (21%) is an indicator of low access to education when compared with regional and international averages, with out-of-school Syrian children scoring alarmingly high at 40% and 90% for primary age and secondary age, respectively.

The World Bank's Human Capital Index has largely attributed the low overall outcomes for children in Lebanon to their poor educational outcomes. The index estimates that Lebanese children will only reach 52% of their potential productivity as adults, which is lower than both the MENA average (57%) and the upper middle-income country average (56%) (World Bank, 2021a).

Educational level attainment

The most common highest level of education attained by residents aged three years and above is elementary school at a rate of 25.7%. Following that, 21.5% attained an intermediate education level and 21.4% university level and above (Table 44). Across the secondary and university levels, attainment is marginally higher for females than males.

There is, however, a particularly stark gap between the genders in regard to illiteracy (8.7% of females compared to 4.4% of males).[104] The national illiteracy rate among residents aged 10 years and above is 7.4%, with Non-Lebanese showing almost double the rate for Lebanese residents (6.3% and 12% respectively) (CAS and ILO, 2019). Illiteracy rates are higher within older age groups, reaching 42.4% for residents 85 years and above. Moreover, the percentage of women who are illiterate is greater than that of men (Ibid).

104 Note: The survey shows an inverse relationship between the level of education and age group: Illiteracy increased, and university attainment decreased with age. For example, 33.5% of illiterate residents were 70 years old and over; in contrast, 2.0% were between 5 and 9 years old. Similarly, while 20.1% of those with a university degree were between 20 and 24 years old; only 4% were 70 years old or over.

Level of education	*Female*	*Male*	*Total*
Illiterate	8.7	4.4	6.6
Not enrolled yet	1.6	1.8	1.7
Pre-school/read and write	7.5	6.6	7.1
Elementary	23.4	28.3	25.7
Intermediate	20.6	22.5	21.5
Secondary	15.6	15.3	15.5
University and above	22.1	20.6	21.4
Undefined education level	0.4	0.4	0.4
Total	100	100	100

Table 44 Highest level of education by gender aged 3 years and above. *Source:* CAS and ILO, 2019.

A recent source indicates that the gender gap for educational attainment in Lebanon ranks in the bottom third of 156 countries surveyed (World Economic Forum, 2021).

The Global Gender Gap Report

113/156 Education attainment: Lebanon's rank relative to 156 countries

Source: World Economic Forum, 2021.

Segregating the data by nationality shows that 17.2% of Lebanese residents attained a secondary level of education and 25% university level and above, which are much higher percentages compared to the Non-Lebanese scores of 8.4% and 6.3% respectively (CAS and ILO, 2019) (Figure 29).

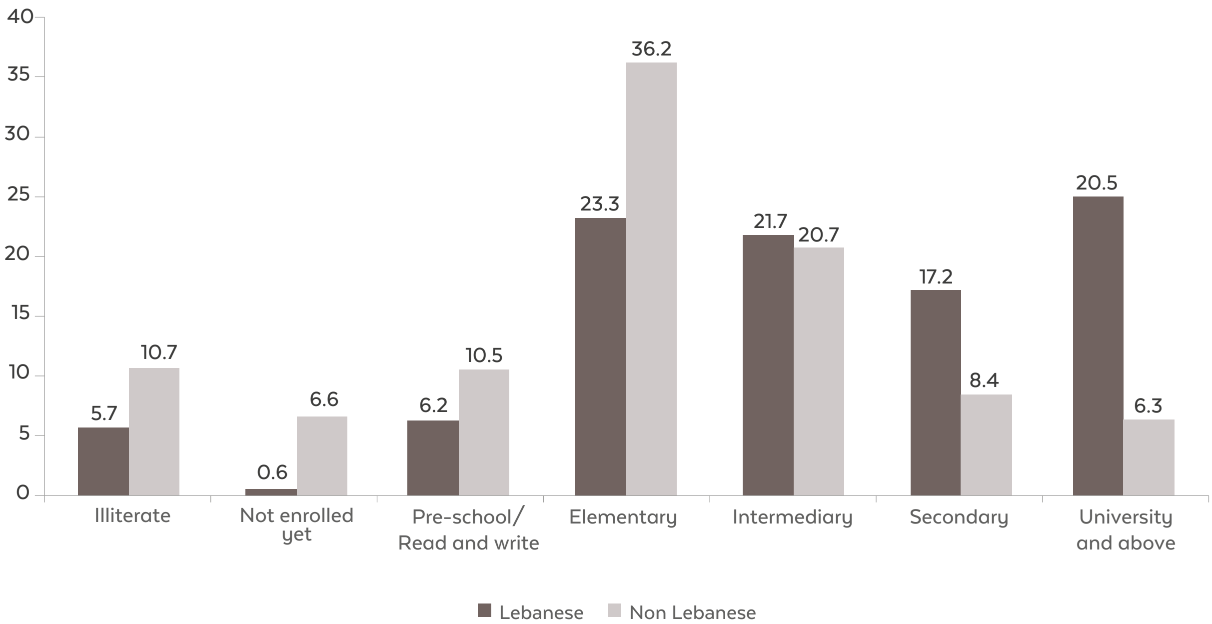


Figure 29 Education level by nationality, ages 3 years and above (%). *Source*: CAS and ILO, 2019.

Syrian refugee crisis

From 2011, the protracted Syrian crisis has had a severe impact on the Lebanese educational system by overstretching its public sector capacity (GoL and UN, 2021). To support the right to education for all, the Lebanese government combined efforts with UN agencies and NGOs to include more school-aged children in formal education through the enrollment of Syrian children in public schools, whilst also aiming to strengthen the public system. From 2013, public schools provided afternoon shifts or 'second shifts' accessible only to non-Lebanese students in increasing numbers (Malmö University, 2017). MEHE also established a certified non-formal educational framework addressing early childhood learning, basic literacy and numeracy and accelerated learning to ease the transition of students with missed years of education into the formal learning systems.[105] However, 48% and 84% of displaced children aged 6 to 14 and 15 to 17 respectively remained out of formal schools. Reported reasons for non-completion of education were poverty, residency rules, low value of education, child marriage and labour among others (Malmö University, 2017).

The compound crises since 2019 have also had a detrimental effect on education (GoL and UN, 2021). Whilst the average years of schooling by the age of 18 is in principle 10.2 years, this figure was reported to have dropped to 6.3% when adjusted for actual attendance

105 This is demarcated in the overall strategy developed by MEHE: Reaching all Children with Education Plans (RACE 1: 2014-2016 and RACE 2: 2017-2021) that aims at providing equitable access to education, improving the quality of services and enhancing governance and managerial systems and policies (MEHE, 2016; GoL and United Nations, 2021).

(GoL and UN, 2021). Closures and non-attendance linked to COVID-19 public health measures (Ibid), rising pressure for children to switch from schooling to economic activities, and the rising challenge of transportation costs for the most disadvantaged appear likely to continue depressing this measure.[106]

Gender parity in education is achieved at primary level. There is a gender parity index score of 1.1 at secondary level in favour of males (GoL and UN, 2021:68).

COVID-19 impact

Since March 2020, school closures have kept over 1.2 million children in Lebanon out of classrooms (UNICEF, 2021). As elsewhere across the world, many Lebanese schools implemented a distance learning programme; however, remote learning has presented its own disproportionate challenge to the most vulnerable communities regardless of nationality due to the inequitable access to devices and connectivity for both students and teachers (GoL and UN, 2021) and inequitable literacy rates among supervising caregivers (IACL, 2020).

Beyond the significant household expense of maintaining an internet connection and the instability of the connection available, the daily government power supply outages combined with skyrocketing prices for neighbourhood-level private generator power driven by the rising cost of fuel is increasing the number of households who are unable to even charge their devices reliably to undertake educational work.

Economic crisis

In the context of Lebanon's current economic crisis, UNICEF has highlighted that families lacking the financial resources for basic necessities such as food and medicines are deprioritizing education, with children increasingly placed at risk through adoption of negative coping mechanisms. With virtually no access to social support and protection systems, 15% of families in 2020 kept their children out of school amounting to 400,000 children, and 9% of families sent their children to work (UNICEF, 2021). Among surveyed caregivers, 80% reported that children are having difficulty concentrating on their remote studies which may be attributed to hunger or mental distress (Ibid).

Households' financial stress is also pushing children from private to public schools, further pressuring the already overstretched public system. As at January 2020, around 40,000 children made this move in the middle of the 2019-2020 academic year, a 15% increase in the number of children registered in public schools at the beginning of the year (260,000 child). As the crisis deteriorates, these numbers are set to increase (Babin, 2020).

Public spending on the education sector is insufficient and among the lowest in the MENA region; in 2020 it accounted for less than 2% of GDP. With the ongoing economic crisis, education funding will likely be further diminished (World Bank, 2021a).

Beirut Port explosion

The Beirut Port explosion of August 2020 exacerbated the deficits in education infrastructure in Beirut City, where there was already a lack of capacity to meet demands for construction, rehabilitation and provision of equipment (World Bank, 2021a).[107] Damage was sustained in 163 schools (92 public, 69 private and 2 UNRWA schools), 20 technical and vocational education and training (TVET) facilities, and 8 universities affecting 550,000 students (UN-Habitat, 2021a). The blast impacted not only school infrastructure but also the quality and continuity of education through the psychologically traumatic impact on students and staff, increasing the risk of dropouts and vulnerabilities among marginalized groups (GoL and United Nations, 2021).

Public school buildings

As well as shortages in qualified teaching staff, public schools in Lebanon have long suffered from dilapidated built infrastructure. MEHE (cited in GoL and UN, 2020:24) estimated that a third of public schools are in need of major rehabilitation. The high use intensity of public schools running two shifts can be anticipated to accelerate their deterioration relative to other schools. The abovementioned transfer of students from private to public school education in the context of the ongoing economic depression is adding further pressure on the public school infrastructure. Most public schools are not adapted for accessibility to those with motor disabilities (GoL and UN 2021:66).



Photo in Beirut. ©UN-Habitat, 2020

106 For instance, the prohibitive cost of transport to school as well as pressure to contribute to household income were cited as reasons for Palestinian refugee children increasingly dropping out of school in 2021 (WAFA, 2021).

107 The estimated losses in the education sector were between $70 million and $85 million and the damages between $15 million and $20 million (World Bank et al, 2020).

City level

School enrollment rates by public / private institution by district

At the level of the districts containing the ten selected cities, the highest percentage of public school enrolment among students aged 3 to 24 years of age was registered in Hermel with 64.9%. The districts with the highest share of non-free private school enrolment were Keserwan containing Jounieh City (72.4%) and Metn which makes up part of Beirut City (66.9%) (Figure 30) (CAS and ILO, 2019).

For selected disadvantaged neighbourhoods profiled in the ten cities, Table 45 offers a neighbourhood-level breakdown of school enrolment rates disaggregated by Lebanese and Non-Lebanese cohorts.

- Among Non-Lebanese, the majority of students are enrolled in public schools across all neighbourhoods, with particularly heavy reliance on public sector provision in the neighbourhoods analyzed in Tripoli (up to 90.3% in Jabal Mohsen) and Zahleh (89.2% in Haoush El-Oumara).
- Among Lebanese, enrolment is also concentrated in public schools across most of the neighbourhoods, with only six of the 16 analyzed neighbourhoods showing reliance mainly on the private sector. The neighbourhoods in Baalbek City are particularly reliant on the private sector.

Enrolment rate by district and type of educational institution %

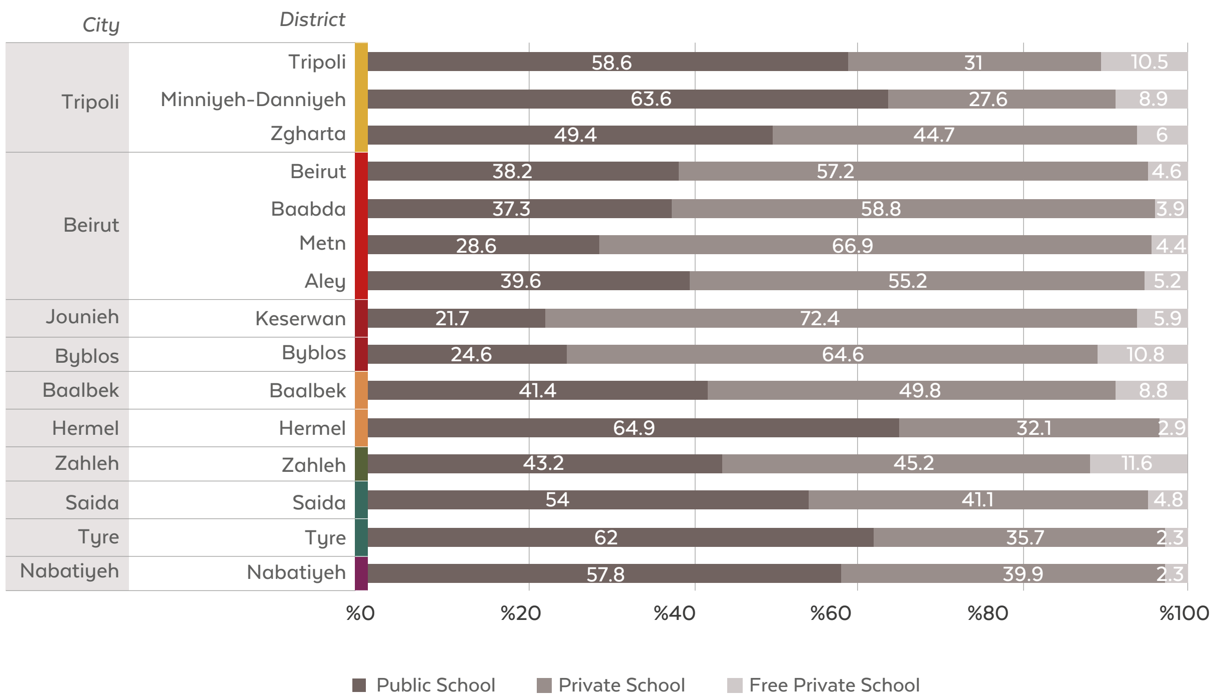


Figure 30 Currently enrolled 3 to 24 year old students by district and type of institution (%). *Source*: CAS and ILO, 2019.



Photo in Baalbek. ©UN-Habitat, 2019

Neighbourhood	*Rate of children enrolled in public schools among Lebanese*	*Rate of children enrolled in public schools among non-Lebanese*	*Rate of children enrolled in private schools among Lebanese*	*Rate of children enrolled in private schools among non-Lebanese*
Tripoli City				
El-Qobbeh	66.7%	84.8%	31.8%	13.8%
Tabbaneh	79.7%	75.3%	20.3%	24.7%
Jabal Mohsen	75.8%	90.3%	23.3%	8.0%
Haddadine	84.2%	89.9%	15.8%	10.1%
Beirut City				
Daouk-Ghawash	59.6%	55.4%	39.9%	43.7%
Hayy Tamlis	39.6%	66.1%	60.4%	33.9%
Sabra	55.7%	68.8%	43.3%	31.2%
Karm El-Zeytoun	80.7%	53.0%	19.3%	47.0%
Maraash	59.2%	63.9%	40.1%	32.8%
Hayy El-Jadid	43.0%	64.7%	57.1%	35.3%
Nabaa	52.2%	59.2%	47.4%	38.0%
Jounieh City				
Hayy El-Kharoubeh	No data	No data	No data	No data
Baalbek City				
Shooab	35.1%	68.8%	64.9%	31.0%
Mogher El-Taheen	28.8%	48.1%	69.3%	28.3%
El-Soleh Sahet El-Naser	37.8%	77.3%	61.7%	22.0%
Zahleh City				
Haoush El-Oumara	48.0%	89.2%	50.5%	8.5%
Saida City				
Old Saida	76.5%	60.0%	23.5%	39.8%
Tyre City				
Maachouk	65.7%	54.4%	33.5%	45.3%

Table 45 Rate of enrolment in public and private schools among Lebanese and non-Lebanese across profiled neighbourhoods in the ten cities. *Source:* UN-Habitat and UNICEF, 2017-2020.


Photo in Tripoli. ©UN-Habitat, 2019

Perceptions of education services

Table 46 shows awareness of, willingness to use and satisfaction with education services for the profiled disadvantaged neighbourhoods in the ten cities. Broadly, awareness of education services is the lowest scoring parameter across the neighbourhoods; willingness to use services is somewhat higher; and satisfaction with the services the highest-scoring measure. Variations within this pattern stand to be scrutinized in order to inform geographically targeted interventions aimed at raising awareness and encouraging school attendance at community level. For instance, gaining an understanding of why Tripoli City's El-Qobbeh neighbourhood scores relatively poorly across these parameters whereas Baalbek City's Mogher El-Taheen neighbourhood scores highly may offer insights with applicability to other cases.



©UN-Habitat, 2019

Neighbourhood	*Awareness of subsidized education services*	*Willingness to use education services*	*Satisfaction with education services*
Tripoli City			
El-Qobbeh	56.5%	40.5%	52.0%
Tabbaneh	55.6%	58.8%	60.8%
Jabal Mohsen	55.7%	52.7%	52.7%
Haddadine	59.8%	59.7%	64.0%
Beirut City			
Daouk-Ghawash	56.3%	81.1%	74.6%
Hayy Tamlis	54.1%	41.7%	72.3%
Sabra	52.7%	63.3%	74.6%
Karm El-Zeytoun	56.1%	86.1%	94.0%
Maraash	59.5%	62.4%	61.8%
Hayy El-Jadid	69.8%	60.7%	87.0%
Nabaa	58.1%	62.3%	58.5%
Jounieh City			
Hayy El-Kharoubeh	No data	No data	No data
Baalbek City			
Shooab	49.5%	56.6%	88.4%
Mogher El-Taheen	80.2%	86.1%	75.1%
El-Soleh Sahet El-Naser	61.5%	54.3%	89.6%
Zahleh City			
Haoush El-Oumara	42.9%	76.1%	70.1%
Saida City			
Old Saida	49.1%	68.3%	73.7%
Tyre City			
Maachouk	53.6%	70.7%	82.1%

Table 46 Awareness of, willingness to use, and satisfaction with subsidized education services across profiled neighbourhoods in the ten cities. *Source:* UN-Habitat and UNICEF, 2017-2020

Average years of education

Against a national average count of 11.6 years spent in education, figures vary upon disaggregation to the level of the districts containing the ten selected cities (Figure 31), with the fewest number of years in education showing in Hermel (10.3 years) and Tyre (10.4 years); and the highest number of years in Keserwan (13.5) and Beirut (12.8) (CAS and ILO, 2019).

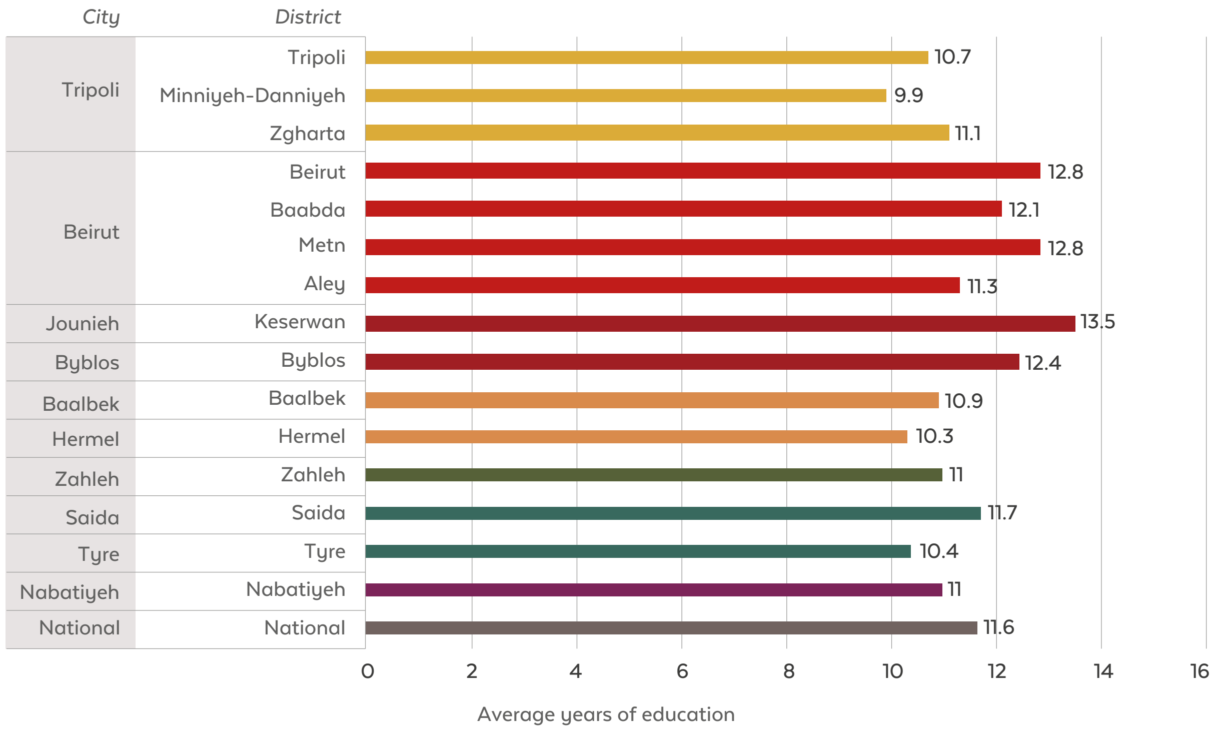


Figure 31 Average years of education by district. *Source*: CAS and ILO, 2019.

Overall, Lebanese residents receive more years of education (12.1 years) compared to Non-Lebanese who only receive an average of 9.4 years. That relativity is uniformly replicated in each of the districts containing the ten selected cities (Figure 32). For Non-Lebanese, Hermel has the lowest years of education average at 8.1 years, and Keserwan the highest at 10.5 years (CAS & ILO, 2019).

Out of school

Based on data gathered in 2018, of residents aged 3 to 24 years old, 43.8% were not enrolled in any type of educational facility, of which 24% cited financial difficulties and their lack of capacity to pay tuition fees as reasons. Other reasons included getting married, learning difficulties, going into the workforce, having completed their education or were forced to stop due to the Syrian war, among others (CAS and ILO, 2019).

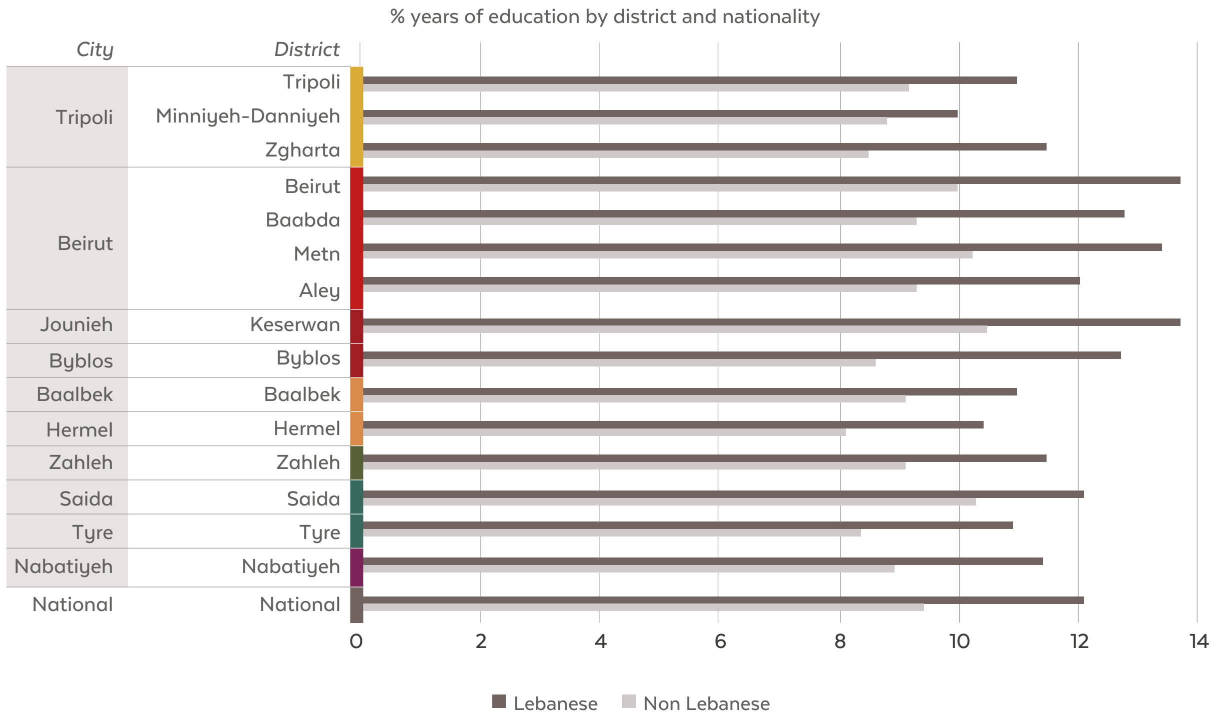


Figure 32 Average years of education by district and nationality *Source*: CAS and ILO, 2019.

In late 2020, municipalities from the ten selected cities responding to the government's IMPACT survey (Lebanon Central Inspection & Ministry of Displaced, 2021) self-reported the proportion of children of 4 to 16 years of age who are outside the school system. Municipalities in four cities – Saida, Baalbek, Beirut and Hermel – reported rates of around 30% and above (Figure 33).

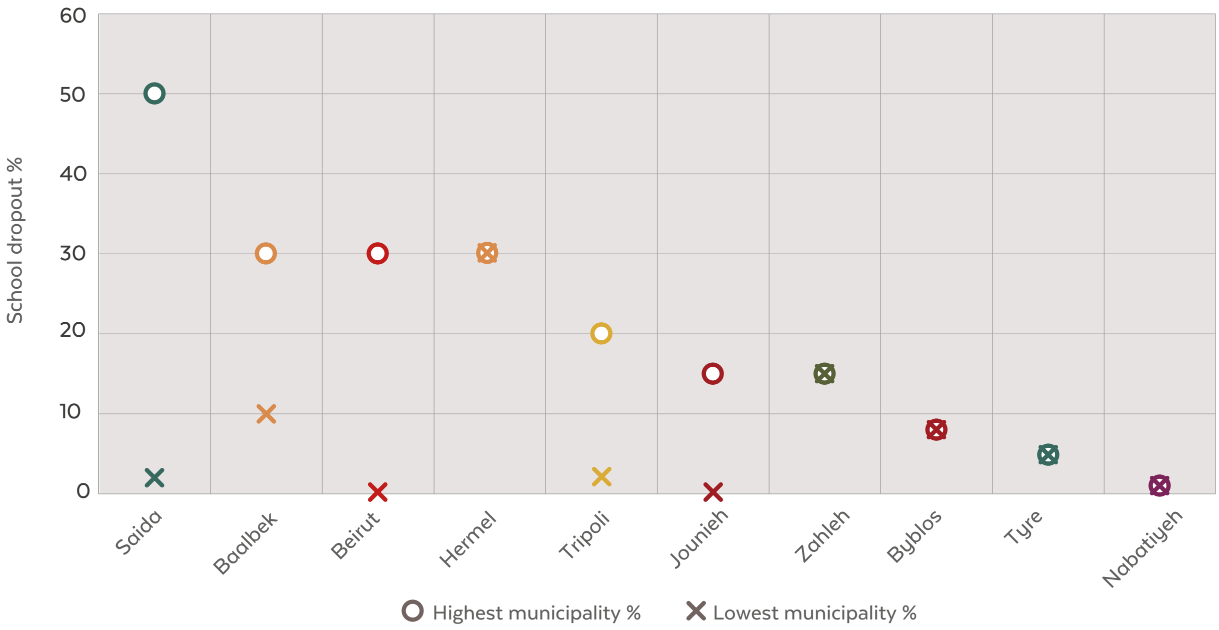


Figure 33 Range of municipal-level percentages of Lebanese youth between 4 and 16 years old outside the school system within the municipalities of each of the ten cities, as reported by the local authority. *Source*: Lebanon Central Inspection & Ministry of Displaced (2021).

City municipalities group discussion

Inter-municipality collaboration on education?

- Notwithstanding the centralized nature of education governance in Lebanon, city municipality survey respondents reported current collaboration on education in three cities (Byblos, Hermel, Tyre).
- Intermunicipal cooperation on school places across the three municipalities of Jounieh City was highlighted, with pupils being allocated places from a city-wide pool and not necessarily within their municipality. The extent to which this rational use of pooled social infrastructure resources is replicated in other urban centres, where city-level collaboration may mitigate demographic pressures typical to growing cities, is not clear.
- The sector was considered an urgent priority for future intermunicipal collaboration by municipal respondents from Tripoli City.

City municipalities undertaking recent education sector projects

Through the IMPACT survey of municipalities (Lebanon Central Inspection & Ministry of Displaced, 2021), only five municipalities located across three of the ten selected cities reported 'the existence of initiatives and projects in the past five years to improve the educational sector'. These were:

- Antelias-Naqqach; Ghobeire and Chiyah municipalities (Beirut City)
- Saida Municipality (Saida City)
- Hermel Municipality (Hermel City)

Ways forward

- Relevant education sector entities should be actively engaged as stakeholders in territorial and urban planning deliberations at national and city scale respectively to ensure the mutually beneficial coordination of their built and spatial needs with those of other public policy areas, such as transport, housing and economic development.
- Conversely, education should be mainstreamed in all discussions on urban development, recognizing its status as a human right; as a key public service underpinning city prosperity and wellbeing generally and the inclusivity of economic growth in particular; and as a significant component of the urban built environment.
- Lebanon's population is concentrated in its cities; its educational systems are embedded in their built and social infrastructure; and inclusive education policy requires spatialized subnational data to identify communities most in need. The wide

variations in education indicators between cities in Lebanon reinforce the need for tailored subnational interpretations of national education policy. Despite the sector not being the traditional preserve of city governments, there is an ongoing need for city authorities to participate in central government-led education policy-making. City responses could be articulated, recognizing education as a local as well as national issue. This could possibly proceed in line with UNICEF's 'Child Friendly Cities Initiative' framework and may build on experiences in education-related municipality collaboration identified in the municipality questionnaire noted above.

- UN-Habitat advocates that central government and cities should formulate and implement technology access strategies to mitigate digital divides, focused on vulnerable groups, in an era of remote learning (UN-Habitat, 2020: xxxi). Such strategies stand to take advantage of the economies of scale offered by urban population densities.



Photo of Jounieh. ©Ahmad Chinder, 2021

Safety and security


Photo in Beirut. ©UN-Habitat, 2019

Urban safety is a complementary concern to crime and violence prevention that ‘starts from the observation that inadequate urban development and local governance, and social and territorial exclusion patterns encourage crime and violence’ (Milliken, 2016). . As well as natural or manmade shocks, urban safety can be impacted by protection risks including those emerging from chronic disadvantage in regard to basic needs like housing and security of tenure, water and sanitation; and deficits in other public goods like open spaces. Such dimensions are often associated with poorly planned urban development. Fostering urban safety encourages a whole-of-city analysis of risk factors, spanning both active threats and baseline vulnerabilities

The triangular relationship between safety and security, development and human rights lies at the core of global development agendas including the SDGs and the New Urban Agenda (UN-Habitat, 2017a). SDG 16 aims to ‘Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels’. The NUA calls for integrating urban safety measures including violence and crime prevention into all urban planning efforts.

> ‘Making cities safer is a prerequisite to their livability, the right to the city for all, and sustainable development in general.’
>
> *(Milliken, 2016:3)*

In 2019, UN-Habitat developed UN System-Wide Guidelines on Safer Cities and Human Settlements (UN-Habitat, 2019a) which offers a standard for how local governments can improve actual and perceived urban safety, aiming to promote a version of urban safety and security that builds social cohesion and collective quality of life. It offers insights into the range of statistical and perceptions-based data that can be used to design and monitor policies.

National

Lebanon has long struggled with achieving safety and security, affecting the development of the country and its major cities. Major conflict episodes have included the 1975-1990 Civil War and the 1996 and 2006 wars with Israel. These have interplayed with continuous political instability and tensions between political parties, driven by domestic and regional dynamics. Since 2011, the conflict in neighbouring Syria has had an ongoing impact on Lebanon, with the resulting influx of around 1.5 million refugees into the country meaning that it now hosts the highest number of displaced people per capita in the world (GoL and UN, 2021). Lebanon’s pre-existing development constraints

have been tightened with the raised demographic pressure on the country's basic and social services infrastructure, reducing its resilience to shocks.

In addition to this complex national safety and security status, Lebanon's economic crisis and local currency devaluation ongoing and deepening since 2019 is actively eroding human security. The COVID-19 pandemic since 2020 and associated public health measures have further exacerbated poverty and increased humanitarian needs. Tensions have been rising due to competition for jobs and access to services and resources, with the Social Stability sector under the Lebanon Crisis Response Plan particularly citing worsening gaps in solid waste management and electricity supply as undermining communities' trust in local authorities (GoL and UN, 2021:172).

At city level, this report has identified multiple sources of urban unsafety in Lebanon, spanning structurally unsound residential buildings and insecurity of tenure, water pollution, solid waste mismanagement including open burning and its attendant air pollution, precarious electrical cabling in neighbourhood streets, road accidents linked to deteriorated vehicles and limited measures for pedestrian safety including pavements.

City snapshots onto security and safety

This section offers brief illustrative vignettes highlighting touchpoints between safety and security and the urban socio-economic space:

Beirut – unsafe streets at night

A neighbourhood profile of Hamra in the capital (UN-Habitat and RELIEF Centre, 2020) identified through focus group discussions the perceived unsafety of streets at night among vulnerable groups. Perceptions stemmed from previous incidents of robbery and verbal harassment, as well as incidents linked to political tension and nationality or cultural differences. Participants from different age groups mentioned their concerns about the safety of the neighbourhood for women during night time, with Lebanese youths stressing that women are more prone to experiencing constraints to their free and safe movement inside the neighborhood (Ibid).

Tripoli – localized conflict impacting the business environment

Conflict has contributed to shifting Lebanon's second city, Tripoli, from its position as a regional trade centre in the 1950s to one the poorest cities not only in Lebanon but in the region contemporarily (UN-Habitat, 2016b, 2017b). Over 2015 to 2016, the city's business environment, job market and image were adversely affected by armed sectarian conflict in the adjacent neighbourhoods of Jabal Mohsen and Bab El-Tabbaneh at the centre of the city.

Tyre – solid waste management enhancing cohesion

In the context of pressure on the solid waste system in Tyre district partly driven by the influx of Syrian refugees from 2011 and with recognition of solid waste management as a source of inter-community tension in Lebanon, the Union of Municipalities of Tyre pursued an integrated solid waste management approach through its technical office, which supervises a waste treatment and sorting facility in Ein Baal. The UoM organizes open coordination meetings for all stakeholders; assists actors to work within the frame of an integrated waste management plan; and often succeeds in channeling funding to its identified needs and priorities (DRI, 2017).

Saida – insecurity from competition for jobs

As part of profiling a part of Saida City's historic core known as Old Saida neighbourhood, focus group discussions showed that safety and security concerns were prevalent among children, youth and adults alike. The presence of youth 'troublemakers' and male children in the streets were perceived to present a feeling of insecurity for female youth and younger children. Crime, drug abuse and armed conflict were also cited as reasons for unsafety in the area. Lebanese adult females also reported the competition with refugees over access to livelihoods opportunities as a source of insecurity (UN-Habitat and UNICEF, 2019).

Lebanon-wide-technology for safer streets

A group of independent activists working through a feminist collective in Lebanon, Nasawiya, aims to foster a Lebanese society without harassment in its public and private spaces by actively reporting incidences of harassment; developing and creating access to a set of tools – including digital ones – for women and men who want to resist harassment in their daily lives; and promoting campaigns to raise awareness of this goal.

Community tensions surrounding competition for services and utilities

A periodic inter-communal relations perception monitoring system in Lebanon gathers data on sources of community tensions. 'Competition for services and utilities', a factor relevant to urban development, is cited as one of a number of sources of tension by respondents. Drawing on the monitoring report for August 2021 (ARK and UNDP, 2021a), Table 47 shows the share of respondents perceiving this factor as a source of communal tension across the governorates containing the ten selected cities. Tensions driven by competition for services and utilities appear heavily focused in the Baalbek-Hermel Governorate, at 66%. Whilst statistically less reliable at lower geographical scales, a drill-down to district level shows that this factor is a source of tension more so in Baalbek (67% of district respondents) than in Hermel (45%). It may be noted that Baalbek scores poorly on self-reported wealth, wastewater connections, school dropouts and other measures relative to other cities



Photo of Beirut Port following the Beirut Port explosions of August 2020. ©Ahmad Chinder, 2021

analyzed (see Table 5), indicating relatively lower access to services and resources in this area.

Other high-scoring districts in Table 47 are Baabda (82.1%) and Nabatiyeh (60%).

An initial reading thus suggests that appropriate service improvements in these geographical areas would in principle yield higher social stability dividends than in other locations.

Source of tension: Competition for services and utilities - Yes		
City	*Governorate*	*%*
Tripoli	North Governorate	6
Beirut	Beirut Governorate	21
Jounieh	Mount Lebanon Governorate	32
Byblos	Mount Lebanon Governorate	32
Baalbek	Baalbek-El Hermel Governorate	66
Hermel	Baalbek-El Hermel Governorate	66
Zahleh	Bekaa Governorate	8
Saida	South Governorate	25
Tyre	South Governorate	25
Nabatiyeh	South Governorate	25

Table 47 Overview of communal relations in Lebanon at governorate level reported by survey respondents (all cohorts). *Source:* ARK and UNDP, Oct 2021.

City municipalities group discussion

Inter-municipal collaboration on safety and security

City municipality survey respondents reported current collaboration on '**safety and security**' in four cities (Byblos, Jounieh, Hermel, Baalbek) (Table 16).

- Respondents highlighted that safety and security are within the mandate of the state police rather than then municipal police (Tyre, Byblos), but that municipalities should take a greater role in maintaining social stability (Hermel, Zahle) due to their familiarity with their local communities (Zahleh).
- The security situation, typically driven by national instability (Baalbek) is increasingly challenging with the current rising poverty (Byblos) and disputes related to power supply and gas stations (Tripoli, Beirut).
- Tripoli noted coordinated surveillance across at least two of its four municipalities.

Ways forward

Within the vast and complex topic of safety and security, the following points focus on key interfaces with urban governance and planning.

- Gaps in services, access to services and resources are clearly identified in Lebanon as drivers of community tensions and contributors to unsafety. Good urban planning that draws on spatially and demographically disaggregated data that identifies those most in need to (1) reduce current service inequities and (2) integrate adequate servicing into future urban growth is a force for social stability. Conversely, ad-hoc urbanization that is not guided by integrated spatial planning for infrastructure and services, allowing the proliferation of informal housing for instance, is a force for social instability.
- Strong and visible local authorities capable of delivering public goods and services and which operate participatively to improve the quality of life of communities are crucial institutional elements for social stability. Trusted and accountable local authorities can offer peaceful routes to addressing individual and community grievances. Participative decision-making can mean that interventions and plans stand a better chance of being conflict-sensitive. Measures which support the capacities of municipalities to execute their mandates, spanning adequate decision-making and financial autonomy, skilled human resources and more, should continue to be pursued as they stand to improve safety and security.
- Urban development interventions whether through local authorities or donors should be scrutinized from a conflict sensitivity perspective (in line with GoL and UN, 2021). The availability and useability of spatialized multisectoral and demographic data would strongly determine the value of such scrutiny, highlighting the value of adequate urban data in decision-making and the need to institutionalize and systematize its generation and use.
- Safety and security presents a specific link to urban space with regard to public space. The cultural interactions that accessible public spaces facilitate tend to build social capital. Safeguarding and expanding public spaces including soft mobility-friendly streets, covered in the foregoing Public Space section, must be accompanied by attention to their safety, particularly for women and girls. Safety-sensitive urban design principles as well as basic street light provision both stand to be explored. More broadly, guidance on improving actual and perceived urban safety can be drawn from the UN System-Wide Guidelines on Safer Cities and Human Settlements (UN-Habitat, 2019a).
- Whilst safety and security are within the formal remit of central government, municipality discussion group findings have suggested scope for the local level to contribute more to maintaining social stability, drawing on the invaluable local contextual knowledge of municipalities. Exploring mechanisms for boosting cooperation may take into account existing collaboration between neighbouring city municipalities on security (the foregoing has indicated collaboration within one city, Tripoli).

Human rights and inclusion



Photo in Beirut. UN-Habitat, 2019

According to OHCHR, 'Human rights are key to advancing and developing an urbanization that is sustainable and socially inclusive, that promotes equality, combats discrimination in all its forms and empowers individuals and communities' (OHCHR, 2017). The New Urban Agenda puts an onus on city authorities to factor in the needs of women, youth and children, people with disabilities, older persons and other marginalized groups (UN-Habitat, 2017a), with social inclusion recognized as a hallmark of good quality urban planning (UN-Habitat, 2020:17). A human rights agenda is consistent with social inclusion. Across the sectoral themes in the foregoing, links have been highlighted with human rights including that to housing; water and sanitation; health and education. The right to public space has been noted as a prerequisite to the exercise of human rights generally though particularly for cultural rights (OHCHR, 2021); as has the right to participation as an enabler of the advancement of all human rights (OHCHR, 2019). The aim has been to make explicit the human rights dimension of the principles and recommendations advocated for regarding managing sustainable and inclusive urban development in Lebanon.

The 'Human Rights City'

Recognizing the critical role that cities play in fulfilling human rights, the concept of the 'Human Rights City' gained traction from the late 1990s, and now generally describes cities where local governments have formally applied principles of the Universal Declaration of Human Rights as governance norms. It has been observed that 'Recognizing the linkages between human rights cities and the 2030 Sustainable Development Goals (SDGs) will help cities achieve (…) milestones in both arenas' (Kjaerum et al, 2018). A human rights agenda can help cities structure and legitimize progress towards Agenda 2030.

Focus on gender

UN-Habitat has noted that 'urbanization provides unique momentum to advance gender equality, as it is often associated with greater access to education and employment opportunities, lower fertility rates and increased independence' (UN-Habitat, 2020:14) WCR. The Universal Declaration of Human Rights made gender equality a part of international human rights. The World Economic Forum (2021) tracks gender gaps across a range of topics. An overall position of 132 out of 156 indicates a serious multidimensional gender gap of relevance to the fundamental human rights principle of gender equality.

The Global Gender Gap Report

132/156 Lebanon's position relative to 156 countries in overall gender gap index

6/19 MENA regional rank overall (after Israel, UAE, Tunisia, Egypt, Jordan)

Source: World Economic Forum, 2021.

While Lebanon ratified the Convention on the Elimination of All Forms of Discrimination against Women (UNGA, 1979) in 1997, reservations are maintained with respect to equal rights to nationality of children, and equality in marriage and family relations. Gender inequality persists within the legal system, particularly under the personal status laws. The negative implications for women's access to land and property have been noted in the foregoing Housing chapter. Female-headed households are particularly vulnerable to tenure security risks, as recognized in the Lebanon Crisis Response Plan's Shelter sector strategy (GoL and UN, 2021). Lebanon performs poorly in terms of economic participation parity (ranked 139 out of 156 countries) and ranks in the bottom third of surveyed countries in terms of educational attainment and political empowerment. Lebanon however achieves a mid-range rank (82 out of 156 countries) against 'health and survival'.

In the aftermath of the August 2020 Beirut Port explosion, activists have called for the rebuilding and repair requirements in the capital to be seen as an opportunity to create the Arab region's first 'feminist city'. In addition to advocating for urban safety and public spaces; the concept promotes applying the principles of equality, dignity, and access to opportunities in the city (UN-Women, 2020).

Focus on disability

Persons with disabilities routinely encounter barriers restricting their participation in society on an equal basis with others (OHCHR, 2021). The Convention on the Rights of People with Disabilities (UN, 2006) highlights how human rights and freedoms apply to people with disability.

Governorate	No.	%
North & Akkar	17,781	18.20%
Beirut	7,031	7.20%
Mount Lebanon	36,144	37.00%
Bekaa & Baalbek-Hermel	16,293	16.60%
South	12,493	12.80%
Nabatiyeh	7,993	8.20%
Total	97,735	100%

Table 48 Distribution of Personal Disability Card holders by governorate of residence. *Source:* Malmö University (2017).

An estimated 10-15% of the Lebanese population has physical, sensory, intellectual, or mental disabilities (Combaz, 2018). MoSA has registered 103,262 people with a disability and provided them with a Personal Disability Card (PDC) (Malmö University, 2017). PDC holders are concentrated in Mount Lebanon Governorate (containing 37% of national PDC holders) (Table 48).

There is a systemic lack of provision for rights, resources, and services for persons with disabilities in Lebanon. As a result, those with disabilities experience widespread discrimination, marginalization, exclusion, and violence, in the home and within cities (Combaz, 2018). Cities in Lebanon are largely unequipped for people with disabilities. In 2011, an Accessibility Code was adopted by the Government obligating any new public building or space for public use to ensure access for people with disabilities. However, this has not been adhered to even within government buildings, prolonging the constrained physical accessibility of the city to people with disabilities (UN-Habitat, 2016). Public schools also remain largely unadapted for those with motor disabilities (GoL and UN 2021:66).

City municipalities group discussion

Inter-municipality collaboration on human rights?

- City municipality survey respondents reported current collaboration on 'human rights and inclusion' in three cities (noted by Byblos, Hermel, Tyre), with weak or limited collaboration in a further two (Nabatiyeh and Jounieh respectively) (Table 16).
- Another city, however (Tripoli), stated that whilst there is some assistance from protection-related NGOs in coordination with municipalities, that not even basic services are secure.
- Tyre noted that human rights considerations are 'implicit to all (its) interventions'.

Ways forward

- Territorial and urban planning may better foster social inclusion by framing sectoral themes like housing, shelter, water and sanitation, public space as well as cross-cutting processes like participation as human rights interfaces with urbanization.
- There could be scope for proofing existing and emerging urban plans (eg municipality-led master plans, UoMs' non-binding strategic plans, a future revised national spatial planning framework) against human rights principles in a contextually helpful way to calibrate the baseline and identify immediate and longer-term principles and actions which could be incorporated. There may be a specific role for donors funding strategic plan-making to advocate for the approach in the near term.
- The 'human rights city' model links human rights to the SDGs at urban level may constitute a horizon-scanning topic for learning exchange between cities. Frontrunning cities already identifying their governance with human rights principles such as Tyre may offer initial insights on challenges and opportunities based on experience.
- Ensuring the support of human rights through urbanization in Lebanon would require the regular collection of relevant data disaggregated by gender, age and disability as well as by urban and rural locations. The optimum scenario for ensuring time series rather than snapshot data and therefore monitorability is that such data-gathering is formally instituted as part of a systematic cycle coordinated by a capacitated national statistical system.

Heritage and culture



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National

Tourism and the creative economy are important and, in many ways, interdependent components of the overall economic mix in Lebanon. With rich offerings in natural heritage, leisure attractions and cultural and religious heritage, tourism generated 7% of GDP in 2018 (IDAL, 2021). Tourism has been mainly focused on the consumption of goods, commercial leisure activities and services in the main cities and particularly in and around Beirut, though in recent years interest in eco-tourism and rural tourism beyond the capital has grown (Farra-Haddad, 2015). Within the creative economy, cultural and creative industries (CCIs)[108] in Lebanon were estimated to contribute 5% to national GDP and 4.5% to national employment on most recent available figures (UNIDO, 2015:16). As well as contributing to the economy, CCIs also to supporting social inclusion by supporting recognition of cultural differences and multicultural perspectives (UNDP, 2019). The tourism and hospitality sector has, however, proved highly vulnerable to the effects of national and regional instability, with the global COVID-19 pandemic combining with the national economic crisis to further depress activity.

From an urban angle, UN-Habitat observes that 'Cities with a vibrant cultural scene and assets are more likely to attract skilled talent who will boost the city's long-term prospects,' (UN-Habitat, 2020: xxviii). Urban management and planning can support tourism and the creative economy directly, such as through factoring in the preservation and/or renovation of historic buildings, quarters and archaeological sites as well as having regard for the workspace needs of small and large CCIs, from artisanal ateliers to museums and theatres. Delivering livable, adequately serviced urban environments as well as transport infrastructure connecting sites and cities across the country constitute indirect yet crucial forms of support to the sector.

In Lebanon, the NPMPLT (DAR-IAURIF, 2005: II-3 of 34) cites tourism as one of a number of comparative assets that Lebanon could exploit for international competition in the context of a potential economic vision. Moreover, the NPMPLT concept of balanced development of the regions, outlined in the preceding Governance section, includes reliance on the development of touristic functions in Baalbek and Tyre as counterweights to Beirut, supported by improved transport links between cities (Ibid: III-5 of 7). Whilst a Ministry of Tourism was established in 1966[109] with a mandate to promote tourism, regulate tourism professions and companies, execute tourism investment projects and develop archaeological and historical sites and museums for touristic purposes, no official tourism strategy has been developed.

108 For instance, arts and crafts, advertising, design, entertainment, architecture, books, media and software.

109 Several tourism-related bodies predated the MoT, beginning with the Lebanon Tourism Service established in the 1930s within the then Ministry of National Economy.

Whilst strategic attention to the tourism sector has been virtually absent at the national level, a notable exception has been the government's Cultural Heritage and Urban Development (CHUD) project implemented with the World Bank between 2003 and 2016, which aimed to restore and protect historical sites in Tyre, Tripoli, Baalbek, and Byblos. The project was considered progressive in terms of its holistic approach to cultural heritage in the urban context, recognizing the interlinked nature of cultural assets, housing, transport, economy and livelihoods. The CHUD initiative with previous and ongoing recognitions of culturally valuable assets under UNESCO designations. Lebanon benefits from the presence of five renowned UNESCO World Heritage Sites, all of which are listed under UNESCO's 'cultural' category (Table 49).

Official safeguarding of architectural heritage buildings in Lebanon dates to the 1930s. Heritage buildings in cities have succumbed to both wartime damage as well as demolition during post-war reconstruction and - despite in-principle regulatory protection - subsequent real estate market pressure for wholesale redevelopment. Indeed, attrition of the stock of heritage buildings is a feature of most of the main cities. The August 2020 Beirut Port explosions caused extensive damage to the concentration of listed heritage buildings and other non-listed buildings and multi-building neighbourhoods with special features in the capital. Damage to historical quarters with concentrations of CCIs also brought fresh attention to the value and needs of this subsector.

City level

Across the ten selected cities all contain historic quarters of heritage and touristic value. UNESCO recognitions are noted in Table 49.

City	*UNESCO designation?*
Tripoli	UNESCO tentative list (2019)
Beirut	UNESCO Creative Cities Network member designation (2019)
Jounieh	No
Byblos	UNESCO World Heritage Site - Cultural type designation (1984)
Baalbek	UNESCO World Heritage Site - Cultural type designation (1984)
Hermel	No
Zahleh	UNESCO Creative Cities Network member designation (2013)
Saida	On UNESCO tentative list (2019)
Tyre	UNESCO World Heritage Site - Cultural type designation (1984)
Nabatiyeh	No

Table 49 Presence of a UNESCO designation. *Source:* UN-Habitat, 2021.

Of the ten cities, three (Byblos, Baalbek, Tyre) are designated UNESCO World Heritage Sites (Cultural Category):

- Byblos which contains Phoenician and Roman elements in the medieval town within its walls, and a necropolis.
- Baalbek which contains a complex of temples of the Greco-Roman period with ancient vestiges of Phoenician tradition.
- Tyre which contains ruins from its Roman city era and the mediaeval construction of the Crusades on its former island; on the mainland it has a necropolis, monumental way, aqueduct and hippodrome.

Two cities are on the UNESCO tentative list:

- Tripoli with its 'old town' centre dating to Mamluk era as well as its Rachid Karameh International Fair in Tripoli designed in 1962.
- Saida with its historic town centre including medieval and Ottoman monuments defended by two citadels: a castle of the sea and a castle of the land.

Two cities are UNESCO Creative Cities Network members:

- Beirut, designated as a Creative City of Literature.
- Zahleh, designated as a Creative City of Gastronomy.
- Five cities benefitted from inclusion in the World Bank-funded Cultural Heritage and Urban Development project (Baalbek, Byblos, Saida, Tripoli, and Tyre).

City municipalities reporting developable tourist attractions

City	*Municipality self-reporting the existence of 'touristic attractions prone to be exploited and developed'*
Tripoli	El-Mina
Beirut	Dbaiyeh-Zouk El-Kharab-Haret El-Bellane-Aaoukar, Fanar, Kfarchima
Jounieh	Zouq Mkayel
Byblos	Jbail
Hermel	Hermel
Saida	Saida
Tyre	0
Nabatiyeh	0

Table 50 Municipalities in the ten selected cities self-reporting the existence of 'touristic attractions prone to be exploited and developed'. *Source:* Lebanon Central Inspection & Ministry of Displaced (2021).

Through the IMPACT survey of municipalities (Lebanon Central Inspection and Ministry of Displaced, 2021), municipalities were asked if they could identify 'touristic attractions prone to be exploited and developed exist' (Table 50). Out of the 971 municipalities responding to this question nationally, a substantial 299 (31%) responded in the positive.

Out of the 69 municipalities making up the ten cities focused on in the current report, 44 responded. Of these,



Photo of Tripoli. ©Ahmad Chinder, 2021

8 municipalities (18% of respondents) across six of the ten selected cities self-reported the 'existence of touristic attractions prone to be exploited and developed'.

City municipalities undertaking recent tourism sector projects

Also through the IMPACT survey of municipalities (Lebanon Central Inspection & Ministry of Displaced, 2021), of 971 responding municipalities, 130 (13%) reported the 'existence of initiatives and projects in the past five years to improve the tourism sector'.

Out of 43 municipalities responding from those within the 69 municipalities making up the ten selected cities, 13 (30%) of municipalities spread across eight of the ten cities self-reported the existence of such initiatives (Table 51).

City	*Municipality self-reporting the existence of initiatives and projects in the past five years to improve the tourism sector*
Tripoli	El-Mina, Majdalaya Zgharta
Beirut	Antelias - Naqqach, Choueifat, Chiyah
Jounieh	-
Byblos	Jbail
Baalbek	Baalbek
Hermel	Hermel
Zahleh	Zahle Maalaqa
Saida	Haret Saida, Saida
Tyre	Aabbassiye, Sour
Nabatiyeh	-

Table 51 Existence of initiatives and projects in the past five years to improve the tourism sector. *Source:* Lebanon Central Inspection & Ministry of Displaced (2021).

City municipalities group discussion

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Inter-municipal collaboration on heritage and culture?

- City municipality survey respondents reported current collaboration on 'heritage and tourism' in three cities (Byblos, Jounieh, Hermel, Tyre), with limited collaboration reported in one further city (Nabatiyeh) (Table 16).
- Within the sub-theme of 'conservation of built urban heritage', intermunicipal collaboration has reportedly occurred where built heritage features are geographically connected across boundaries or through the shared use of craftsmen (noted by Tyre). Jounieh also reported multiple joint initiatives mobilized around its sites of architectural heritage.
- Within the theme of 'cultural heritage and tourism promotion', Tripoli reported joint efforts through the union of municipalities (Al Fayhaa) in which the city falls to map touristic sites digitally with international donor funding. The project remains under a committee in one of the city municipalities, Mina.
- Jounieh also reported the mapping of touristic sites and planning of touristic activities enabled by international donor funding.
- Baalbek indicated bilateral communications directly with the Ministries of Culture and Tourism to enhance attention to the Roman ruins within its boundaries. Baalbek is now organizing its own festival events and expressed an openness to collaborate with adjacent municipalities on them.

Ways forward

- The inextricability of cities' cultural heritage from their built fabrics – spanning individual buildings to streets and neighbourhood-level quarters – and the market pressures animating urban land use change drives an imperative to frame heritage policy treatments from an area-based angle that is multisectoral in scope.
- Municipalities within cities are already collaborating to capitalize on the potential shared benefits of heritage preservation, promotion and tourism that is spatially coordinated across municipal boundaries. Further research to elucidate the value to local economies and to fostering a shared city identity may help in scaling up such cross-boundary cooperation in the strategic interest.
- An audit of CCIs at city level would help city authorities understand business support and space needs in the creative economy. The experience of CCI surveying in Beirut following the port explosion may be drawn on. Linked to an economic development agenda, the value chain of CCIs stand to be mapped as a route to better understanding how to support CCIs' competitiveness and maintain the sector's livelihoods.
- Tourism is historically a highly significant contributor to Lebanon's GDP to an extent not matched by tourism strategy development at national or city levels. Building on the CHUD experience, strategy development should seek to link heritage management to economic development and job creation.
- The decreed NPMPLT (DAR-IAURIF, 2005) has earmarked tourism as an internationally competitive comparative advantage that can be harnessed to rebalance development across the Lebanese territory, with potential anchors on the inland historic cities of Baalbek and Tyre. Investment in inter-city transport infrastructure to support increasingly polycentric development stands to be coordinated spatially across the culture, tourism, economy and transport sectors.

Environment



Photo of Baalbek, ©Ahmad Chinder, 2021

Marine and river pollution as well as air pollution feature heavily in Lebanon. Pollution sources range across poorly managed municipal solid waste and wastewater as well as industrial waste, combustion of industrial and private transport fuels. There is also a progressive attrition of natural ecological habitats and loss of land due to uncontrolled urban sprawl, agricultural activities and quarrying.

The foregoing analysis has variously focused on economic, social and environmental angles onto sustainable urban development. The environmental issues and risk factors linked to urban sprawl and green space loss, water pollution, partial wastewater network coverage, solid waste mismanagement, car-based mobility, and dependence on non-renewable energy sources have been briefly acknowledged. At the same time, urban expansion has been documented, indicating the likelihood of growing pressure on environmental systems in a context of severely limited governance capacity to coordinate responses.

This section highlights the main environment-related topics referenced in the decreed NPMPLT (DAR-IAURIF, 2005) decreed in 2009 and thus inarguably within the scope of Lebanon's territorial and urban planning system. Air quality and the urban heat island effect are then briefly outlined as topics particularly identified with urbanization and not addressed in the foregoing. Finally, a perspective onto environmental issues on which urban municipalities collaborate is given, based on the city municipality questionnaire survey undertaken for this report.

Environment issues identified in the NPMPLT

The NPMPLT (Ibid, Page II-33 of 34) commissioned by CDR considers the following under 'environmental considerations':

- **Water** quality, particularly groundwater contamination due to pollutant infiltration and uncontrolled well drilling against a backdrop of limited wastewater treatment;
- **Solid waste** generation, in terms of volume growth, limited recycling and associated dumping sites, often at cities' coastlines and inland valleys, and limited availability of appropriately sited hectarage for sanitary landfills;
- Marine pollution by untreated or domestic and industrial **wastewater** outfalls as well as shoreline disposal of solid waste;
- Natural terrestrial area degradation through **urban sprawl**, quarries, waste dumping, and the need for urban planning regulations to orientate urban growth towards areas of low environment risk';
- Quarrying to supply extracted materials to residential and commercial building activities including land reclamation projects, as well as to road building and maintenance projects.

- The environmental scope for national and urban planning in Lebanon is in principle secured at least to this minimum set of concerns through the NPMPLT, notwithstanding its unimplemented status. Revision or renewing of the document stands to reflect and incorporate environmental data and regulatory tools - including the Strategic Environmental Assessment (SEA) (2012) - emerging since its decree in 2009 in coordination with the Ministry of Environment and other stakeholders.

Strategic Environmental Assessment

In an attempt to mainstream environmental sustainability[110] in national development processes, the government issued in 2012 a Strategic Environmental Assessment (SEA) decree (No. 8213) for public sector policies, plans and programmes. The SEA was designed mainly for the water and wastewater management, energy, transport and solid waste management sectors,[111] with guidelines for land-use planning, aiming to identify impacts on the environment and natural resources and put in place upstream mitigation measures.

It has been observed that no SEA yet appears to have been used for masterplans (Public Works Studio, 2018). Expanding application of the tool to public sector initiatives implicated in urban development appears to offer a structured and endorsed entry point for near-term uptake. Reconstruction activities in Beirut following the Beirut Port explosions may offer a testbed, particularly given the emphasis on 'building back better' (World Bank, 2021).

Focus on air quality

Air quality has a direct impact on environmental quality of life, with new understanding of the severity of damage to public health presented by air pollution, concentrated in urban areas, recently emerging (WHO, 2021). Poor air quality has been associated with higher mortality rates among COVID-19 patients.

11 SUSTAINABLE CITIES AND COMMUNITIES

Target 11.6 Clean cities

Indicator 11:06:02 Annual mean levels of fine particulate matter (population weighted) by location



29.64 mg/m^3 (2016)

30.68 mg/m^3 (2014)

Source: Lebanon SDG Monitor (ESCWA, 2021b)

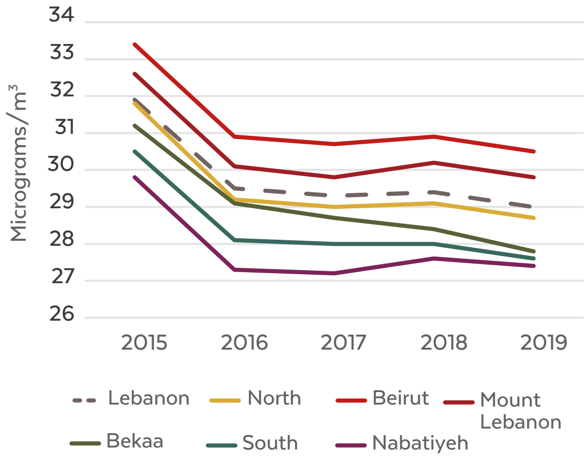


Figure 34 Mean population exposure to PM2.5 (micrograms/m³) - air pollution. *Source:* UN-Habitat Urban Indicators Database, 2021.

In Lebanon, the main source of air pollution is traffic, followed by power plants then industry. Private electricity generators, described in the Electricity section above, are particularly damaging to public health because of their location in residential neighbourhoods. Whilst air pollution levels in Lebanon are as yet only around a quarter of that in a highly polluted city like Delhi, reports suggest a growing problem (Afif, quoted in Al-Monitor, 2019); UN SDG data (ESCWA, 2021b) on the other hand shows constant figures from around 2016 to 2019 (Figure 34). At subnational level, the highest air pollution is found in the two governorates of Beirut and Mount Lebanon containing Beirut City.

It has been suggested that pollution controls should be applied at source, whether fixed or mobile, including by invoking the 'polluter pays' principle as enshrined in Lebanon's Law 444/2002 Environmental Protection (Doumani, 2019:16). The SEA tool may be used to address projects and policies within the transport and energy sectors as the main ones affecting ambient air quality.

Focus on urban heat island effect

The high thermal potential of built surfaces in cities combined with the 'waste' heat surge from urban processes like mass air conditioning, road transport and - salient in Lebanon's case, neighbourhood-level private power generators - produces an urban heat island (UHI) effect meaning the urban microclimate may be significantly hotter than adjacent rural areas. Whilst the UHI effect in its own right has a negligible impact on global temperature trends, it impacts on localized surface temperatures and thus water stress, energy demand for cooling with global GHG implications, air quality and public comfort and health.

110 Lebanon's overall environmental framework is managed and supervised by the Ministry of Environment (MoE), with tasks identified in the underlying Law 216/93 of 1993, which has been amended a number of times since mainly to support MoE's engagement in national and international environmental issues.

111 It has latterly been applied to support consideration of pending offshore petroleum works in Lebanon.

Mitigation measures amenable to urban planning span shading and moisture retention of surfaces, including the preservation and expansion of urban green cover and other heat-absorbent roof cover like solar panels as potential routes to reducing the UHI effect. Afforestation is a legitimate element of an urbanization policy. Urban geometry that takes advantage of the prevailing wind direction to lower temperatures reduce the UHI effect. Adequate spacing between buildings serves to allow ventilation and reduce heat trapping. Promotion of energy efficient green buildings is an adaptive measure.

The importance of mitigation and adaptation of the UHI at surface and atmospheric levels is growing in Lebanon in parallel with the urban growth trajectory, with urban planners and designers in possession of the key tools to respond. Recent simulation modelling research in Beirut has demonstrated the potential positive impact on urban microclimates and pedestrian thermal comfort of green areas and water features in creating 'cool islands' in Lebanese neighborhoods, with implications for people-centred urban design (Fahed et al, 2020) including in regard to public spaces. Earlier modelling research also in Beirut showed the micro-climatic thermal comfort value of vegetative cover on rooftops and at street level as compared to built cover surfaces. The study called for attention to the potential of Lebanon's urban planning laws and practices to incorporate measures to reduce the UHI effect (Kaloustian et al, 2016).

City municipalities group discussion

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Inter-municipal collaboration on environmental sustainability?

City municipality survey respondents were asked to identify sustainable urban development topics on which they collaborated with each other within their cities (Table 16). Acknowledging the transboundary nature of environmental **issues, air quality and water pollution were the most commonly cited topics, with urban expansion into natural ecosystems reported in one case.**

Air quality

Three cities (Tripoli, Byblos, Hermel) reported current inter-municipality cooperation on air quality, with one further, Baalbek, reporting limited collaboration.

- **Tripoli reporting an air quality project undertaken through the UoM of which it is part (Al Fayhaa) with international funding support. Al Fayhaa UoM also undertakes city-wide air quality monitoring.**
- **Byblos flagged air quality as a 'high concern' in regard to the granting of construction permits.**
- **Tyre considered the topic a priority for future joint working, particularly as the current electricity crisis pushes reliance on private neighbourhood-level generators.**
- **However, Nabatiyeh – the city with the fourth-largest share of unbuilt land cover - viewed that its 'abundant greenery' meant it had no air pollution issue. Air quality data for Nabatiyeh governorate indeed shows it to be the least polluted governorate (Figure 34).**

Water pollution

Two municipalities (Tyre and Hermel) indicated intermunicipal coordination on water pollution, with three further (Byblos, Baalbek and Nabatiyeh) citing limited collaboration. It may be noted that water is officially under the control of the regional water establishments.

- **Beirut indicated collaboration in cases of interrelated infrastructure across municipal boundaries.**
- **Tripoli noted that whilst the regional water establishment periodically test water, that there is no monitoring of seawater pollution.**
- **Baalbek highlighted enduring groundwater pollution challenges arising from permeable septic tank installation by displaced households residing in informal tented settlements near the city.**
- **Byblos reported an aggressive approach to countering water pollution, particularly in the municipality of Blatt.**

Urban expansion into natural ecosystems

- Only one city, Baalbek, cited expansion into natural ecosystems as an environmental issue on which its municipalities are collaborating. It is a self-aware position: of the ten selected cities, Baalbek has expanded at the fastest rate by far, with its footprint growing by over 700% (2.5km^2 to 20.5km^2) from 1990 to 2021 (Table 14).

Ways forward

- The range of sectors in regard to which good urban management can support environmental sustainability highlights the value of integrated urban planning, and should be used to support advocacy to donors and state entities for a fit-for-purpose national and urban planning system.
- As such, there is a natural partnership between the Ministry of the Environment and entities responsible for territorial and urban planning and plan-making that warrants upstream prioritization.
- In terms of sustainable design at residential unit or building level, subsidies or payment schemes that incentivize the use of eco-efficient mechanisms (alternative flush systems in toilets, water taps that release less water quantities, rain water harvesting)

may be considered, combined with building regulations revisions to foster uptake as well as complementary public sensitization campaigns. Opportunities to institute urban design regulations at street and neighbourhood levels aimed at reducing the urban heat island effect may also be sought out.

- There is a significant degree of collaboration and coordination between municipalities in the selected cities on environmental issues. This appears to holds promise for the potential to keep environmental issues to the fore in city-based urban governance.
- Lebanon's existing levers for upholding environmental standards including its 'polluter pays' provision and SEA law represent advances, though implementation and enforcement measures remain to be explored.


Photo of Saida. ©Ahmad Chinder, 2021


Photo of Tripoli. ©Ahmad Chinder, 2021

Conclusions and recommendations



Photo of Saida. ©Ahmad Chinder, 2021

Conclusions and recommendations

This report has provided a national and city-level analysis of the state of urbanity in Lebanon. It is offered at a time of deep and compounding socio-economic and political crises unfolding onto a longstanding backdrop of inexorable population urbanization and attrition of urban infrastructure and services, affecting water, wastewater, housing, solid waste, transport, energy, health, education, social stability and more. While considering the complexity and interconnectedness of the urban dynamics of the country, the urgency to channel immediate crisis responses into a widely conceived 'building back better' that imprints a systemic legacy of resilience at national and subnational levels could scarcely be greater.

In this context, this report has demonstrated the critical importance of cities to Lebanon's present and future. In a country 88.9% urban today and projected to reach 90.6% urban by 2030 - the end of the SDGs Decade of Action, sustainable development in Lebanon largely means sustainable *urban* development.

This report has corralled data on a range of themes and sectors in pursuit of a comprehensive diagnosis of the state of Lebanon's cities, aiming to foster a shared view of the risk landscape through an urban lens. National level analyses, for many sectors well-rehearsed elsewhere, has been briefly drawn on to contextualize an original city-level focus and inter-city comparison absent in the current literature, focusing on the ten main cities that together make up 41% of the national population.

Against each sector, a recommendation with findings highlights are given, followed by a set of cross-cutting recommendations as follows.

Sectoral findings and recommendations

Space

Recommendation: Measure and plan for cities with different growth pressures

> The ten selected cities defined in terms of their continuously built-up areas range in size from the capital, Beirut, at 110.6km^2 down to Hermel at 4.7km^2 at 2021. Whilst the largest absolute gain in built-up area footprint over the last 30 years (1990-2021) was in Beirut (30.7km^2), the percentage growth across the cities varied immensely: whilst Beirut grew by a proportionally moderate 38.4% over that period, six of the smaller cities expanded by over 100%, with Baalbek having expanded vigorously by 718%. On this metric, a reordering of the urban hierarchy at the secondary city level below the capital thus appears to be in motion. It is precisely such sub-national differentiation in urban growth pressures that must be recognized, understood and addressed via national and city-level planning so that urban infrastructure and basic services planning can in principle be aligned. The alternative is that any current urban interventions and investments do not solve for the future, and that per capita urban infrastructure and services deficits continue to grow, with the effects disproportionately accruing to the most disadvantages communities and households.

> Urban development approaches from city to city may in principle span trend-led visions where the prevailing growth patterns are broadly accommodated to trend-modulating visions where an alternative growth pattern is planned for, and various permutations in between. Within the parameters of national policy guidance and regulations, differentiated approaches to key urban planning parameters like city boundary management, residential densities, mixity of uses, infill development and open space standards can be associated with each city vision.

Population

Recommendation: Generate population data through official channels that can be disaggregated to urban areas

> With 1.26m people or 22.6% of the de facto national population concentrated in Beirut and only 0.34m or 6% in the second city of Tripoli, Beirut is truly a primate city. However, the Lebanese Constitution (1926 as amended) and the unimplemented National Physical Master Plan of the Lebanese Territories (DAR & IARUF, 2005, decreed 2009) both seek balanced territorial development, arguably implying a more polycentric Lebanon. Whether to embrace the current peaked urban hierarchy or to seek a flatter one that fosters growth in second-tier cities is a strategic policy matter for national scrutiny and deliberation. The revision or rewriting of Lebanon's national spatial development framework is the forum for such debate and should be informed by urban land use and population change data such as but not limited to that presented in the current report. There are credible policy rationales for both supporting the capital's role as the national economic driver and for seeking a more polycentric growth pattern across the territory; indeed, it may be viewed that the two positions are not mutually exclusive. However, an explicit policy position is required so that near-term infrastructure and services decision-making solve for future spatial demography. A highly participative process of consensus-building should characterize

such deliberations so the decision has continuity of support over successive government administrations.

- The population of the ten cities has been estimated based on cadastral population figures linked to respective continuously built up areas. Reliable and nationally endorsed/owned figures for cities on a longitudinal basis are required for planning adequate services and infrastructure in support of sustainable urban development.

Recommendation: Encourage managed population density in cities to lower the per capita cost of services including mass transit

- Cities tend to operate more efficiently at higher population densities, with lower land consumption and utilities cost per capita, lower car dependency and increased walkability/soft mobility to closely located services, and more scope for public transport infrastructure investment. Population density in the ten selected cities ranges widely, reaching a fairly dense 13,653 persons/km^2 in Tripoli and dropping to 3,722 persons/km^2 in Baalbek. Further disaggregation to sub-city and even neighbourhood level would be useful in understanding the spatiality of densities underlying the city average. For instance, one of Lebanon's most disadvantaged neighbourhoods, Tabbaneh in Tripoli City, has a resident population density of 48,700/km^2 (UN-Habitat and UNICEF, 2018). Such geographically granular data is important to the design of connectivity networks. City-level averages may obscure higher densities at smaller area level that stand to be researched.

Governance

Recommendation: Institute a national public entity for coordinating the spatial dimensions of ministries' activities

- At national level, urgent consideration is required to re-instituting a public entity for coordinating the spatial dimensions of sector ministries' service delivery and investments (eg Ministry of Energy and Water; Ministry of Public Works; Ministry of Environment, Ministry of Culture; also Committee for Development and Reconstruction). A review of the terms of reference of a Ministry of Planning established in the early 1960s and dissolved with the onset of the Lebanese Civil War from 1975 may offer one starting point for consideration.

Recommendation: Implement a national spatial development framework

- In terms of governing urban development towards sustainability, the national level presents a policy vacuum in terms of implemented guidance, despite the existence of an ambitious national physical framework decreed in 2009. Notwithstanding the implementation gap, the precedent of such a framework is a valuable demonstration that endorsement of such a sensitive document is indeed within reach in Lebanon. It stands ripe for updating or rewriting and – to close the implementation gap - the design of supporting multi-level institutional architecture which to date has been absent.

Recommendation: Support municipality-led 'city partnerships' or similar voluntary fora to progress whole-of-city urban development

- At city level, no city has a dedicated urban authority or other form of entity to coordinate multisectoral city management. A range of urban development plans are present across the ten cities: many unfunded, some outdated, others in the form of masterplans awaiting central government decree; and none spatially matching the continuously built-up area; with only Tripoli showing an inter-municipality strategic development document somewhat approximating to the level of the city. This mosaic exists in the context of the absence of endorsed or even technical working definitions of wider city boundaries as development units at local level, and of an absent tier of spatial coordination at national level. The legacy of unimplemented plans must be addressed.
- Municipalities, UoMs and city stakeholders may consider mobilizing non-statutory 'city partnerships' to focus on issues where an urban lens adds value. Such voluntary alliances should be conceptualized in consultation with city municipalities and their UoMs, taking account of the incumbent institutions at local level, drawing particularly on the experience of UoMs as repositories of experience in inter-municipal collaboration, Partners could pool and aim to scale up good practice and innovations in the areas of strategic planning of the non-binding type sometimes undertaken by UoMs, and of participation where this has been trialled through donor-led or other initiatives.

Municipal financing

Recommendation: Explore mechanisms to support municipalities servicing a high proportion of households not registered to the municipality.

- Among the ten cities, there is a wide range of nationality mixes. The population of Jounieh is predominantly host community, at 93.9% Lebanese; whereas that of Zahleh is almost evenly split between host and foreign nationals, at only 52.4% Lebanese. This presents implications for municipal financing from central government, whereby the share of foreign nationals using the infrastructure, services and housing of an area are not factored into the central government grant received at local level. For four of the cities, the population is over a quarter Syrian (Baalbek 34%, Hermel 25.1%, Tripoli 25.9%, Zahleh 47.6%), suggesting a particularly rapid localized demographic shock in these locations since

the onset of the Syrian crisis in 2011, with associated challenges in regard to services provision.

> Lebanese nationals registered to vote in one municipality by virtue of ancestry but living in another municipality are also not factored into the central government grant to their municipality of residence, an imbalance particularly affecting urban areas which attract in-migration and which stands to be remedied potentially through voting rights reforms.

Recommendation: Build the capacities of municipalities to increase their financial self-sufficiency

> As means to enhance the provision of public services, municipalities should be supported to collect a higher share of local tax dues, to build fair partnerships with the private sector, and to better exploit their exiting municipal real estate assets,

Economy and livelihoods

Recommendation: Identify spatial pockets of deprivation at sub-city level to target the furthest behind

> As elsewhere internationally, the ten cities are spatial concentrators of both relative wealth and poverty to which district and governorate level averages may be blind. Over half the cadastres making up each city (except Byblos) are amongst the 251 most vulnerable nationally as identified by IACL (2015), whilst all (against except Byblos) contain one or more of the most disadvantaged areas nationally as identified by UN-Habitat and UNICEF (2017). Pockets of definitive urban vulnerability are manifest in the 11 Palestinian camps that are now part of the urban fabric of five of the selected cities, where they are generally characterizable as slum dwellings that are increasingly inhabited by non-Palestinian nationals (LPDC, 2017). Chronic and acute crises will affect these poverty pockets more than other areas.

Recommendation: Recognize the criticality of good national and urban planning to economic development

> The inability of public institutions to invest in adequate infrastructure to support a growing Beirut, and poor transport connectivity between and within cities has been recognized as a constraint on economic potential. Failure to match urban growth in the fast-growing second-tier cities identified in this report with adequate infrastructure and services investment will mean that their role in contributing to spatially balanced development across the territory will be compromised.

Housing and HLP rights

Recommendation: Establish a data-led comprehensive national housing policy, aligned with a national spatial development framework, to support inclusive and sustainable housing provision.

> Housing conditions particularly in poor urban neighbourhoods have been shown to be inadequate. Nationally, 61% of the urban population is estimated to live in slum-like conditions, up from 53.1% in 2014. Around 50% of buildings in some of the most disadvantaged city neighbourhoods are in need of major structural repair, presenting a collapse risk - potentially on a mass basis in face of a future seismic shock. Residential overcrowding has been shown to be up to 34% of households for Lebanese and 57% for Non-Lebanese in such neighbourhoods. Home ownership across the governorates containing the ten cities does not dip below 64.1% of households (Mount Lebanon), indeed reaching as high as 84.1% for Baalbek-El Hermel. A holistic national housing strategy that addresses both the renter and owner segments with a focus on widening access to affordable, adequate housing is an urgent if complex priority.

Recommendation: Improve understanding of the HLP rights of the most vulnerable, particularly women and Non-Lebanese, and formulate mitigation measures.

> Lebanon has legislation that discriminates against certain groups in relation to the right to adequate housing, with foreign nationals and women particularly impacted. Whilst the HLP challenges of Non-Lebanese nationals are relatively well researched, those affecting Lebanese households stand to be better understood. Limited evictions monitoring for Lebanese currently underway should be scaled up to offer more comprehensive monitoring. The HLP implications of cross-cutting legislation such as the Nationality Law and Personal Status Law require further attention in terms of mitigation measures and reform prescriptions.

Water

Recommendation: Undertake a comprehensive mapping of the water network as a basis for coordinating technical fixes that reduce network losses and for addressing sub-municipality areas not connected.

> City-scale analysis of the water sector is particularly challenging. Data available at the level of the four RWEs mandated for the sector was supplemented with governorate-level data only. Nationally, an average of 82.3% of residences are connected to the national water supply network, though Baalbek El-Hermel Governorate lags on this measure at 69%. Technical losses in the network are estimated at 48% (2010). Water bill collection rates vary widely between regional water establishments – from 62% in Beirut Mount Lebanon RWE to only 18% in the Bekaa RWE covering Baalbek, Hermel and Zahle. Targeting of technical fixes to address losses in the network as well as to illegal

connections facilitated by a comprehensive network mapping, combined with mechanisms to encourage consumer water conservation possibly including by improved bill collection rates are well-acknowledged needs. There could be an impactful role for municipalities in awareness-raising and promotion of behavioural change towards water conservation practices. The greatest inefficiencies, however, are at the non-urban level of irrigation as the biggest water consumer.

> The importance attached to water and sanitation particularly in densely populated urban areas was highlighted during the COVID-19 outbreak in Lebanon as elsewhere. This public health imperative stands to be capitalized upon for further advocating for a distinct urban agenda to the sub-nationally regionalized water provision discussion in Lebanon.

Wastewater

Recommendation: Expand wastewater treatment by designing pathways away from septic tank reliance towards networked solutions and by activating existing treatment plants and mobilizing funding for new ones

> The release of untreated wastewater to the land and to water bodies present a dire threat to public health and environmental quality. Around 8% of all wastewater is treated and 40% of buildings nationally remain unconnected to the public wastewater network. Two-thirds of households in Nabatiyeh district and over half in Hermel relied on a septic tank, associated with land and groundwater contamination.

> Within the selected cities, selected disadvantaged neighbourhoods showed up to 42.9% by street area with a malfunctioning wastewater network (in Jounieh). Similarly, buildings with blocked or not connection to the wastewater network in selected disadvantaged neighbourhoods reached 12.7% (in Tripoli).

> City municipalities reported the greatest degree of inter-municipal collaboration on wastewater management compared to other sectors, suggesting potential for enhancing city-level strategizing on the theme.

> Operationalizing existing wastewater treatment plants to their respective design capacities - or indeed at all in cases - appears a clear priority.

Solid waste

Recommendation: Focus community awareness-raising efforts on the waste reduction and recycling on cities as the major generators of municipal solid waste.

> Solid waste volumes are rising in Lebanon at a time of apparent ebbing governance capacity for effective management across successive administrations, further to a major solid waste management crisis in 2015 when city streets particularly across Beirut and Mount Lebanon witnessed garbage pile-ups and spontaneous burning. The experience of integrated solid waste management in Tyre UoM stands as a demonstration of possible arrangements for uptake in other locations. Recycling of municipal solid waste is minimal with the functioning of some secondary sorting facilities stalled (Tripoli, Saida) and behavioural changes at household level required to reduce waste volume.

Recommendation: Coordinate the spatial aspects of solid waste management, particularly sink facilities, in alignment with a revised national spatial development framework.

> Lebanon's national spatial development framework, currently pending updating and the design of implementation mechanisms, offers a forum through which to mediate the siting of sensitive national facilities such as sanitary landfills.

Electricity

Recommendation: Explore opportunities presented by the current power supply crisis to trigger shifts to renewable energy sources, addressing immediate and longer-term needs.

Recommendation: Identify scope within the building code to foster increased energy efficiency in new buildings.

> National challenges to households in regard to maintaining a consistent electricity supply at reasonable cost, navigating between public mains supply and private neighbourhood level generators, have been severely exacerbated in the current economic crisis with constraints on access to fuel curbing generation capacity at all levels. Investment in alternative decentralized green power technologies at both city and household levels, as well as updating building regulations to improve energy efficiency of structures stand to support a sustainability agenda in the future.

Urban transport and mobility

Recommendation: Implement a national urban policy on transport, aligned with a national spatial development framework, to diversify the transport modal mix and reduce the environmental impact of the transport sector.

> Urban mobility in Lebanon is dominated by the heavily polluting private motor vehicle, with no harmonized conceptual framework or funding mechanism to guide modal shift towards mass public transit. A comprehensive regulatory framework combined with an integrated program of capacity building is needed to raise awareness at national and municipal levels on best practices to promote and implement public transport solutions, and to foster a culture change at the level of the public.

Recommendation: Maintain and increase urban densities and safeguard appropriately sited urban land to enable future public transport infrastructure investment.

> Maintaining and increasing the population densities offered by cities - over 13,000 persons/km^2 in Tripoli and over 11,000 persons/km^2 in Beirut – are key long-term considerations to unlocking the business case for public transport infrastructure investment that is squarely within the purview of urban policy.

Public space

Recommendation: Undertake city-wide public space inventories to inform public space visions in the context of city-wide urban planning.

> The share of each of the ten analyzed cities that comprises unbuilt space varies over a range of 56.8% (Zahle) to 34.9% (Saida), though the usership of these spaces has not been comprehensively logged, including in terms of safety. In the context of historically weak state mechanisms to defend open space from urban development pressures in Lebanon, public space preservation and expansion is a key theme mobilizing CSOs. Conducting a city-wide public space assessment, covering unbuilt spaces and streets, leading to formulation of an evidence-based public space strategy is a route that cities may adopt and that national spatial development policy may support, and to which UN-Habitat has offered technical support elsewhere (UN-Habitat, 2015).

Health

Recommendation: Mainstream public health as an explicit urban planning objective and engage health stakeholders in urban planning decision-making.

> The link between public health and urban basic services and infrastructure means that health benefits stand to be gained indirectly from improved urban management in Lebanon. This is in regard to issues including residential building quality and crowdedness, access to water and sanitation; transport modal shift towards low-emission and active mobility modes, solid waste management that avoids open burning; access to safe public spaces; regulation of street level hazards including hazardous power cabling. Urban planning activities should mainstream improved public health as an explicit objective.

Education

Recommendation: Mainstream the spatial aspects of education in urban planning and engage education stakeholders in urban planning decision-making.

> The education sector in Lebanon is characterized by poor attainment levels and inequitable access, particularly affecting Non-Lebanese students, with deteriorated buildings and teaching staff shortages particularly affecting the public school sector. The current economic crisis combined with the effects of COVID-19 has led to 15% of households keeping their children out of school (UNICEF, 2021).

> Education is a key public service underpinning city prosperity and wellbeing generally and the inclusivity of economic growth in particular. Education can improve people's ability to advocate for their rights to basic services.

> Education facilities are a significant component of the urban built environment with multi-sectoral urban planning interactions spanning transport, housing and open space. Education should be factored into all discussions on urban development.

Safety and security

Recommendation: Address gaps in access to basic urban services and utilities to support social stability

> Whilst susceptible to international and national influences, safe and secure cities can partly be fostered through good urban management and planning combined with trusted urban leadership through strong local authorities. In Lebanon, competition for services and utilities is one source of community tension, perceived by resident communities as particularly important in Baalbek district, where 67% of survey respondents cited it as a source of tension (ARK and UNDP, 2021).

Human rights and inclusion

Recommendation: Proof existing and new urban planning policies against human rights norms to benchmark their compliance and identify entry points for improving inclusion.

> The conceptual model of the 'Human Rights City' where human rights principles are applied in cities' governance norms may be drawn on to benchmark current and future policy approaches in cities.

> Integral to the above, data generation should be designed in a way that allows a disaggregated understanding of variations in the status and vulnerabilities of socio-demographic groups and places to support a 'leave no one behind' and human rights agenda.

Recommendation: Undertake regular gathering of data disaggregated by gender, age and disability as well as by urban and rural location to support targeting and monitoring of programming in terms of human rights.

> A human rights agenda is consistent with social inclusion, which is recognized in the New Urban Agenda (UN-Habitat, 2017a) as a marker of quality urban planning. Whilst human rights interfaces are identified across the sectoral chapters of the report, a selective focus possible within the scope of the

current report highlighted that Lebanon shows significant gender parity gaps – particularly in terms of female economic participation where it ranked 139 out of 156 countries (World Economic Forum, 2021) as well as deficiencies in the participation of persons with disabilities in society, with a 2011 Accessibility Code remaining unimplemented.

Heritage and culture

Recommendation: Formulate a national tourism strategy that incorporates the role of cultural and creative industries, and that supports the territorial rebalancing approach of the NPMPLT.

> The inextricability of cities' cultural heritage and creative economies from their built fabric drives an imperative to frame policy treatments and interventions in holistic, multisectoral and area-based strategies. A third of municipalities in Lebanon responding to a national survey (Central Inspection and MoD, 2021) indicated the presence of touristic attraction amenable to development in their areas. Municipalities within cities are already collaborating to capitalize on the potentially shared benefits of spatially linked heritage preservation and tourism.

> A 2018 estimate suggested that tourism generated 7% of GDP (IDAL 2021), with cultural and creative industries contributing 5% to national GDP at 2015 (UNIDO, 2015).

> A spatially referenced national tourism strategy with city chapters is warranted in light of the existing and potential importance of this sector in Lebanon to its economy and indeed to wider civilization. This should be consistent with the decreed NPMPLT (DAR-IAURIF, 2005) which has earmarked tourism as an internationally competitive comparative advantage that can be harnessed to rebalance development across the Lebanese territory, with potential anchors on the inland historic cities of Baalbek and Tyre.

Environment

Recommendation: Leverage the environmental dividends of good national and urban planning to advocate for the implementation of the national spatial development framework.

> Environmental risk factors linked to urban sprawl and green space loss, water pollution, partial wastewater network coverage, solid waste mismanagement, car-based mobility, and dependence on non-renewable energy sources are highlighted across the report as concerns integral to sustainable urban development.

> City municipalities in Lebanon reported collaboration on a small number of environmental issues, namely air quality, water pollution and urban expansion into natural ecosystems.

> In addition to a set of environmental topics of concern identified as within the scope of concern of the NPMPLT (DAR-IAURIF, 2005) Lebanon's Strategic Environmental Assessment Law (2012) and Environmental Protection Law (2002) are amongst existing levers through which the environmental performance of cities may be supported, though implementation and enforcement appears limited to date.

Cross-cutting recommendations

Recommendation: Adopt an urban lens onto sustainable development in Lebanon

It is recommended that sustainable development in Lebanon be explicitly viewed by decision-makers and stakeholders through an area-based urban lens as a starting point for multisectoral, multi-partner coordination. More than most, Lebanon is a country of cities. Sustainable development depends on progress in cities; conversely, a lack of progress in cities in terms of the challenges outlined in this report presents barriers to SDG attainment and on many fronts also violates human rights, such as the right to shelter, water and health. Highlighting the inherent complexities of urban systems, the report shows the differentiated baselines of Lebanon's cities including in terms of growth rates, population, poverty, housing, infrastructure and services, the report promotes an area-based perspective onto inclusive development. This focuses attention on reducing geographical multidimensional disparities to chart a path towards more balanced territorial development at the city and national scales.

Recommendation: Link humanitarian and recovery approaches through urban diagnosis and planning

The current compounding economic, political, refugee and health crises affecting Lebanon are generating acute humanitarian stresses that in many ways have roots in longstanding structural weaknesses. The only route out of the current multifaceted crisis is one that pushes towards structural improvements in infrastructure, services and other national support systems to bolster resilience against future shocks at the same time as meeting immediate needs. The efficacy of short term strategies cannot be fully understood without viewing them within a future framework.

Recommendation: Generate demographic and multisectoral data in ways that also support the urban agenda

A patchwork of primary and secondary data has been overlain to characterize the ten selected cities in this report. Whilst the exercise has shown that a great deal of relevant information exists, the data landscape is yet characterized by inconsistent coverage, lack of time series datasets, ambiguous data points, varying conceptions of the geographic city unit; and is commonly out-of-date.

This report has highlighted that good urban planning and management requires data to support programming, monitoring and coordination and to identify the most disadvantaged communities. Disaggregated data is required to make visible equalities groups to monitor human rights and inclusion-oriented initiatives. Disaggregation should also splice along urban/rural lines, a requirement for measuring several SDGs indicators (Annex 1).

The findings thus reinforce the importance of ongoing efforts of the UN to capacitate Lebanon's national statistical capacity under the mandate of the government's Central Administration for Statistics (CAS). Of particular relevance to this report, current efforts by CAS in conjunction with CDR to identify comprehensive urban and rural locations across the national territory for statistical data purposes are highly valued.

In recognition of the city as a unit of analysis for some SDGs, cities may structure urban diagnostic data-gathering activities in light of established urban data frameworks such as the 'UN System-Wide Urban Monitoring Framework' which aims to be 'a key tool for the elaboration of Voluntary Local Reviews (Urban Agenda Platform, 2021).

Finally, it is recommended that the Government and stakeholders support the periodic reiteration of this State of the Lebanese Cities Report to help monitor trends, particularly in the current rapidly changing context, and potentially expanding the scope beyond the current selection of ten cities.

Recommendation: Establish fit-for-purpose institutional structures and policies for governing space and cities

Effective institutions are needed as the basis for enhancing the value of urbanization. To summarize, this report has advocated for:

> A central public entity to coordinate spatial activities of the range of line ministries, providing mediation for resolving flashpoints and capitalizing on synergies. This body could also potentially champion strategic collaboration between municipalities who are part of wider cities.

> A national spatial development framework, building on the NPMPLT (DAR-IAURIF, 2005) designed in mutual support of key sectoral urban-related policies including transport and housing and with implementation mechanisms in place to support general conformity between the local and national levels.

> Municipalities with adequate autonomy to implement sustainable urban development plans and who are willing to cooperate at the city level in the strategic interest.

> Building on the observation (CDR, 2015; Public Works Studio, 2018) that public participation in urban planning is minimal in regulatory terms and that implemented instances are largely instigated in fulfillment of donor project funding requirements, urban planning stakeholders should actively consider how good practice in public participation in Lebanon can be learned from and scaled up, possibly first at an informal level and eventually at a regulatory level.

> A 'soft' form of multi-stakeholder, multisectoral alliance or partnership led by municipalities at the whole-of-city level where there is currently an institutional vacuum (see below).

Recommendation:'City partnerships'

> The absence of a formal governance space for continuously built-up cities in Lebanon on one hand and, on the other hand, the criticality of holistic urban management to sustainable development together prompt the recommendation that cities within their built-up footprints consider establishing 'soft' non-statutory area-based partnerships to mobilize a complementary and flexible coordination mechanism targeting the city scale. Already, inter-municipality collaboration within cities on a wide range of topics relevant to urban development has been documented through the municipality questionnaire.

> Such an area-based 'city partnership' could take as its foundation the municipality groupings identified in the current report,[112] with the urban limit remaining to be further defined in due course via CAS' initiative to establish urban and rural boundaries, currently ongoing. Further partners may include representatives from the UoM(s), RWE, district(s), governorate including relevant governorate-level ministry branches, health and education sector representatives, CSOs, private sector entities and so on, as tailored to the context. An area-based mapping of stakeholders would be a preparatory task

> Each nascent 'city partnership' would itself be best placed to navigate the context-specific working relationship with existing UoMs and may in cases be nested within them.

> Terms of reference could include

- o Mapping comprehensively across the city the spatial constellations of governance entities and stakeholders (including grassroots entities) who should collaborate on the enterprise of integrated city planning for sustainable development, serving the ultimate vision of a good quality of life for current and future people. The imperative is reflected in the numerous SDG indicators which call for disaggregation by urban/rural areas;
- o Strategic urban plan-making at whole-of-city scale with early priority to incorporating a dedicated Information Management and GIS function similar to technical units in some UoMs currently; Coordination on spatial planning matters both at city-to-national level and at within-city level across the constituent municipalities;
- o Mobilizing funding for developments best designed at a city level;
- o Area-based coordination of incoming donor

112 The urban limit definition adopted may be influenced by the currently ongoing initiative of the Central Administration for Statistics to establish urban and rural boundaries comprehensively across the country.

assistance for urban infrastructure and services to identify synergies and resolve spatial or sectoral conflicts;

- o Concerted urban advocacy towards central government, possibly on matters shared across multiple such city partnerships (eg reform of the central government formula influencing the financing of municipalities that excludes residents registered to other municipalities, and which disproportionately affects urban municipalities - see Municipal Finance section above).
- o City 'branding' including to attract inward investment and tourism.

Recommendation: Capacity building of municipalities including by city-to-city knowledge exchange

The capacities of municipalities and thus also of their UoMs in face of the challenges of sustainable urban development have been shown via the municipality questionnaire undertaken for this report to be constrained primarily by funding and decision-making autonomy. In contrast, technical skills among municipal or UoM staff was not perceived as a significant barrier to achieving sustainable development, with several municipalities reporting the existence of unimplemented studies and strategies pending funding or a central government decision.

Insights into capacity-related barriers identified in the municipality questionnaire may be used to help design city municipality capacity-building interventions (eg four cities cited the absence of a diagnostic baseline of information on city status and needs as a barrier to making progress on sustainable development; three identified 'inability of municipalities in their cities to collaborate' as a barrier)) as well as for collective city advocacy on system reforms - for instance, in regard to municipal fiscal space and decision-making autonomy.

The 'city partnerships' could also act as focal points for inter-city knowledge and learning transfer - potentially as part of a national network of cities. Such a learning network would benefit from the ability to compare cities on a like-for-like basis, in the first instance through City Dashboards presented in this report. These may be used to support city-to-city exchanges, such as on ways to improve service delivery efficiency, the use of GIS, policy innovations or other capacity-enhancing topics bearing on sustainable urban development. An agenda of topics for learning exchanges may build on the findings of the city municipality discussion groups convened for this report, covering topics commonly collaborated upon between city municipalities like wastewater and solid waste management as well as those less collaborated upon like water pollution and encroachment into natural ecosystems. Such city partnerships and multi-city networks stand to become transformative territorial alliances to catalyse the localization of the 'urban' SDG 11 and related SDGs, and thus to contribute to an increasingly inclusive and sustainable future for communities in Lebanon.

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Annex 1 Sustainable development goals, targets and indicators that include the terms 'urban', 'cities', 'geographic location'.

The table selects out all instances of the terms 'urban', 'cities', 'geographic location' from the comprehensive list of Sustainable Development Goals and associated targets and indicators (United Nations, 2015).

Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development	
Sustainable Development Goal indicators should be disaggregated, where relevant, by income, sex, age, race, ethnicity, migratory status, disability and geographic location, or other characteristics, in accordance with the Fundamental Principles of Official Statistics.1	
Goals and targets (from the 2030 Agenda for Sustainable Development)	*Indicators*
Goal 1. End poverty in all its forms everywhere	
1.1 By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than $1.25 a day	1.1.1 Proportion of the population living below the international poverty line by sex, age, employment status and geographic location (urban/rural)
Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	
4.5 By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations	4.5.1 Parity indices (female/male, rural/urban, bottom/top wealth quintile and others such as disability status, indigenous peoples and conflict-affected, as data become available) for all education indicators on this list that can be disaggregated
Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable	
11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums	11.1.1 Proportion of urban population living in slums, informal settlements or inadequate housing
11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries	11.3.2 Proportion of cities with a direct participation structure of civil society in urban planning and management that operate regularly and democratically
11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management	11.6.1 Proportion of municipal solid waste collected and managed in controlled facilities out of total municipal waste generated, by cities
	11.6.2 Annual mean levels of fine particulate matter (e.g. PM2.5 and PM10) in cities (population weighted)
11.7 By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities	11.7.1 Average share of the built-up area of cities that is open space for public use for all, by sex, age and persons with disabilities
11.a Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning	11.a.1 Number of countries that have national urban policies or regional development plans that (a) respond to population dynamics; (b) ensure balanced territorial development; and (c) increase local fiscal space
11.b By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels	11.b.1 Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015-2030
	11.b.2 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies
Goal 17. Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development	
Data, monitoring and accountability	
17.18 By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts	17.18.1 Statistical capacity indicator for Sustainable Development Goal monitoring
	17.18.2 Number of countries that have national statistical legislation that complies with the Fundamental Principles of Official Statistics
	17.18.3 Number of countries with a national statistical plan that is fully funded and under implementation, by source of funding

Table 52 Sustainable development goals, targets and indicators that include the terms 'urban', 'cities', 'geographic location'
Source: Extracted from United Nations, 2015.

Annex 2 National and urban population in Lebanon 1975-2034

Year	*Population*	*Population urban*	*% population urban*
1975	2 576	1 725	67
1976	2 598	1 777	68.4
1977	2 606	1 818	69.8
1978	2 605	1 852	71.1
1979	2 603	1 884	72.4
1980	2 605	1 919	73.7
1981	2 616	1 959	74.9
1982	2 632	2 003	76.1
1983	2 651	2 048	77.2
1984	2 667	2 090	78.4
1985	2 677	2 126	79.4
1986	2 677	2 154	80.5
1987	2 672	2 176	81.4
1988	2 669	2 199	82.4
1989	2 677	2 215	82.8
1990	2 703	2 247	83.1
1991	2 752	2 298	83.5
1992	2 822	2 365	83.8
1993	2 901	2 441	84.2
1994	2 975	2 513	84.5
1995	3 033	2 573	84.8
1996	3 071	2 615	85.1
1997	3 093	2 643	85.5
1998	3 114	2 671	85.8
1999	3 157	2 711	85.9
2000	3 235	2 782	86.0
2001	3 360	2 893	86.1
2002	3 523	3 038	86.2
2003	3 701	3 197	86.4
2004	3 863	3 342	86.5

Year	*Population*	*Population urban*	*% population urban*
2005	3 987	3 454	86.6
2006	4 057	3 520	86.8
2007	4 086	3 551	86.9
2008	4 111	3 578	87.0
2009	4 183	3 647	87.2
2010	4 337	3 788	87.3
2011	4 588	4 014	87.5
2012	4 916	4 309	87.6
2013	5 276	4 632	87.8
2014	5 603	4 928	87.9
2015	5 851	5 155	88.1
2016	6 007	5 302	88.3
2017	6 082	5 379	88.4
2018	6 094	5 398	88.6
2019	6 066	5 384	88.8
2020	6 020	5 353	88.9
2021	5 957	5 308	89.1
2022	5 875	5 244	89.3
2023	5 783	5 172	89.4
2024	5 690	5 099	89.6
2025	5 606	5 033	89.8
2026	5 535	4 978	89.9
2027	5 477	4 936	90.1
2028	5 432	4 904	90.3
2029	5 397	4 881	90.4
2030	5 369	4 864	90.6
2031	5 348	4 854	90.8
2032	5 335	4 851	90.9
2033	5 330	4 854	91.1
2034	5 331	4 863	91.2

Table 53 Historic and projected population, urban population and percent urban population in Lebanon 1975-2034, as at 2018. Source: United Nations, Department of Economic and Social Affairs, Population Division (2018).

Annex 3 Report consultation and validation entities

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Real Estate Syndicate of Lebanon (REAL)	Walid Moussa	President
Real Estate Syndicate of Lebanon (REAL)	Mirna Banna	Lead of REAL Data and Index Committee
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